DOCUMENT RESUME

ED 245 092 CE 039 091

AUTHOR Soljan, Niksa Nikola, Ed.
TITLE Recurrent Education in Yugoslavia.
INSTITUTION Zagreb Univ. (Yugoslavia). Inst. for Educational Research.
PUB DATE 83
NOTE 113p.; Works of the Institute for Educational Research of the Faculty of Philosophy, University of Zagreb, Volume 29.
AVAILABLE FROM Jugoslovenski Pregled, Mose Pijade 8, P.O.B. 677, Belgrade, Yugoslavia 11001 ($5.00; quantity price--$4.00).
PUB TYPE Collected Works - General (020) -- Viewpoints (120) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Adult Education; Adult Vocational Education; *Educational Change; *Educational Development; *Educational Finance; Educational Innovation; *Educational Psychology; Education Work Relationship; Employment Problems; Foreign Countries; *Lifelong Learning; Postsecondary Education; Secondary Education; Unemployment
IDENTIFIERS *Yugoslavia

ABSTRACT

These seven papers offer an insight into the different aspects of recurrent education in Yugoslavia. "Recurrent Education and Educational Changes" considers these three processes: the "de-etatization," the democratization, and the de-schooling of education. "The Unity of Education and Work and Recurrent Education" proposes that this unity implies the transformation of recurrent education into a new concept of simultaneous education and work as the basis of the whole educational system. In "Recurrent Education and Social Equality" discussion focuses on the solution of employment problems for low complexity jobs and education for such jobs. Recurrent education is described and educational innovations and suggestions for its further development are discussed in "Present Situation and Developments in Recurrent Education." The paper, "Psychological Aspects of Recurrent Education," considers objectives of recurrent education, factors affecting successful adult learning, learning abilities, relevant experience and foreknowledge, mental fitness, and motivation for education. "Financing Recurrent Education in Yugoslavia" discusses the basic interdependence of recurrent education and the process of structural change in the Yugoslav economy. "Recurrent Education and Socialization of Education in the Context of Secondary and Higher Education Reform" discusses implications of the present educational reform in Yugoslavia. A selected bibliography and glossary are appended. (YLB)

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RECURRENT EDUCATION IN YUGOSLAVIA

Edited by Nikša Nikola Šoljan

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WORKS OF THE INSTITUTE FOR EDUCATIONAL RESEARCH OF THE FACULTY OF PHILOSOPHY UNIVERSITY OF ZAGREB

1983 Volume 29

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Printed by
Srboštampa, Belgrade, 1983

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Published by
JUGOSLOVENSKI PREGLED, Newspaper and Publishing House, Moše Pijade 8/I, Belgrade and INSTITUTE FOR EDUCATIONAL RESEARCH, Savska cesta 77, Zagreb

Belgrade, 1983

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PREFACE

It was in the early 70's that Yugoslav authors became interested in recurrent education. The study of the integration and alternation of work and education was particularly affected by the 1974 educational reform project. Since that time, the relationship between work and education, involving also the problems of recurrent education, have been in the focus of interest of Yugoslav authors.

Recurrent education is seen as one of the strategies for the practical implementation of the concept of permanent education. In this respect there are no differences between Yugoslav authors and authors in other countries. There is, however, one specific feature which distinguishes recurrent education in Yugoslavia from that in other countries. It is to be found in the approach to recurrent education stemming from the theory and practice of Yugoslav self-management.

The book *Recurrent Education in Yugoslavia* contains several contributions on recurrent education by Yugoslav authors. The contributions offer an insight into the different aspects of recurrent education in Yugoslavia. The reader will note that there are certain differences in the approach to recurrent education even among Yugoslav authors.

This book will partly fill in the void in foreign language literature on recurrent education in Yugoslavia. I hope that it will be particularly interesting to readers abroad who are not familiar with the languages spoken in this country.

I take this occasion to thank the authors and all the others who have contributed to this book. I would particularly like to thank the co-publisher "Jugoslovenski pregled" (Yugoslav Survey) from Belgrade and my collegues from the Institute from Educational Research from Zagreb who have made it possible for this publication to be brought out in English.

The Editor

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RECURRENT EDUCATION AND EDUCATIONAL CHANGES

Dr. Stipe ŠUVAR

In Yugoslavia, as in many other countries, recurrent education has become a widely-discussed topic and practical solutions are being sought for its broadest possible implementation. However, many of its aspects are still vague and unclear, causing doubts and uncertainties in defining concepts and especially in identifying practical solutions.

The phenomena of our times which attract attention at all levels, i.e. which almost all people encounter, also include what I would venture to call an increasing importance of school as an institution which has acquired its form and undergone its development in the past centuries, since Komensky and since the 18th century Enlightenment and which today continues to expand technically but is becoming unable to offer all-inclusive education and to satisfy growing educational needs. Another such phenomenon, which runs counter to the one I have just mentioned, is an obvious educational boom which all countries are experiencing today, irrespective of different technical and technological development, economic resources and political and social system.

In relation to these phenomena which widely attract attention, today there is a lot of discussion about the democratization of education in the sense that it should not be strictly confined to specific institutions, regarding its form and content, and that it should be open to everyone who wishes to get educated; and, nowadays, all people have such aspira-

tions but many of them cannot afford to pay for education in addition to their living expenses. We know that, owing to such circumstances, in many countries illiteracy is not only persisting but is even increasing along with demographic expansion, namely, that these countries cannot provide basic literacy for new, coming generations.

On the other hand, in the developed capitalist countries, extensive discussions are being held on the right to education as a specific right which should be incorporated not only in international charters but in constitutions of certain countries and, in particular, in practical policies adopted by forces in power which control the state and the organized social institutions empowered to decide on whether the right to education shall be granted or not.

However, the democratization of education and the right to education, when people speak about them, comprise not only different historical approaches, owing to various levels of historical development of societies and socio-cultural milieux, but their understanding also differs from one society to another. Therefore, it may happen that we use the same words for different things, and thus fail to understand each other completely. And now I will expres my view of the integration of recurrent education in the overall policy and concept of the development of education in the socialist Yugoslavia of today.

In the Yugoslav socialist society as it is today, there is a tendency to rank the majority of society members who comprise the working class and are called workers on the basis of their position in social production, and, consequently, in social life and decision-making on social affairs, i.e. all is *res publica,* together with all those who, according to the social division of labour characterizing the class epoch of mankind, do not belong to the productive majority owing to their different position in production, social labour, society at large and decision-making on social affairs. In other words, the historical idea of socialism in general — and this is our preoccupation under the specific Yugoslav conditions — is to eliminate or abolish class differences, thus bringing the productive forces of our epoch into a position in which they become equal to all other society members or, rather, other society members are equalized with them, which, in fact, implies the achievement

of an ideal classless society. In this context, many things have to be changed in education and in related areas, but this could be viewed only as part of global social changes.

Karl Marx wrote in *Capital* and in his other works that capitalist production is based on depriving the worker — the producer of material goods and the supplier of material services — of all intelectual activities underlying both production and labour. Marx said that in such a mode of production, its intellectual aspects are taken away from the producer and turned against him. These intellectual aspects of production then become established, institutionally and socially, as independent education, independent science, independent culture — something like social sectors separated from material production — which the majority of society members engaged in material production can hardly influence or, if they can, only in the capacity of passive consumers.

It is our intention, depending on the existing historical conditions, to ensure that in the Yugoslav socialist society the worker i.e. the working class win back (maybe "back" is not an adequate word here) this intellectual component of production. In the language of Marxist philosophy and political economy, this back implies the historical idea contained in the struggle for socialism and its development, the idea of the emancipation of labour with a view to establish such a system of social relations and introducing such changes into the existing mode of production which will enable the associated worker or, as Karl Marx would say in *Capital* "the versatile worker" to master social production and, especially, expanded social reproduction. There is also Marx's well-known saying: Those who master expanded social reproduction, master society. And as long as the majority of the society does not master social relations and take expanded reproduction, into its own hands, it will be considered as the working class precisely due to the fact that it is confined to the ghetto of material production, being deprived, therein, of many intellectual dimensions of human life and production.

In one French dictionary from 1826 — (at that time capitalism was still comparatively young and enthusiastic) — there is a definition according to which the worker is a person who performs mechanical operations for which no particular intelligence is

required. Such treatment of the working class by the bourgeoisie in relation to the educational system has, basically, persisted up to the present. The worker is provided with higher qualifications and broader knowledge only if this leads to the production of surplus value, namely, training is offered to the working class insofar as they can contribute to its usefulness. But it is impossible for a worker to break out from that realm of necessity since the system of education is founded on class selection which channels the majority into the production process — to toil and be deprived of intellectual development while the minority climbs the career ladder thanks to the system of education, serving capital in the sphere of intellectual production and control over the working majority. This is what is meant by the career of a professional or of an expert, their rise and the formation of all the auxiliary forces serving capital, forces which have been given the names of separate social strata: bureaucracy, technocracy, meritocracy, etc.

However, Marx has also indicated the directions of development of education in the society which will emerge and grow once the political power of the bourgeoisie has been destroyed. In *The Critique of the Gotha Programme* and in other works as well he pleads for the union of school and factory which capital, as a specific historical force, has established and developed into two separate institutions. On the basis of such merging, the process of education will become reunited with the process of production, encompassing everybody and changing the role of education from the means of reproduction of the class division in society into the means of its elimination.

It must be noted that at this moment, socialist societies are, everywhere, still far from the achievement of this goal. However, it is important to see whether they are pursuing this path and what is going on within specific social processes, especially in terms of a transformation of education which will lead to the materialization of these Marxist ideals.

We say that the purpose of education is to develop a human personality with a versatile intellectual life, creative attitude and searching mind, able to challenge the social conditions and the environment into which it was born, but also to take over its share of labour in society. However, I think that this is not enough, being nothing else than a modern paraphrase

of the old Greek ideal of beauty united with moral integrity, a harmonious personality, a perfection, which has been the ideal of education for 2000 years. In reality, under past historical circumstances, only certain groups or, privileged classes and segments could afford the education which helped them develop a rich personality, a fruitful spiritual life and, consequently, creative freedom of work, life and behaviour. It was due to the very fact that they were free from labour and providing for society's existence that they could achieve that objective. Accordingly, if in a socialist society we lay emphasis only on this aspect and neglect some other specific historical dimensions related to the reform of education, we will not be able to reach this ideal.

Our society — not an abstract society but what we call the organized socialist forces in that society — is struggling today to introduce changes in education, the purpose of which is to contribute to the elimination of class divisions and differences. I. e. education should not continue functioning as an instrument of their reproduction. In other words, the guiding principle is that education should not serve the hierarchy in work and life or its continuation. or, if workers are provided access to higher levels of education, this should not be considered as the way out of the ranks of the working class. On the contrary, education should provide the basis for all to identify themselves, in work and life, with the working class, but not with workers who still live, to use Marx's words again, as miserable, enslaved and despised creatures, but with workers who shall find their freedom in the process of production and gradually take over the spiritual and the overall power in the society.

Therefore, our philosophy cannot and should not accept the idea of education as a system or hierarchy which would only serve climbing the social ladder, making a career and winning of acquiring titles as the compensation for positions which the few had occupied either by birth, in feudalism, or by inherited family wealth, in capitalism. Knowledge should not be private property sold in the market and alienated from education.

I have been expressing myself mostly in negative terms, wishing to point out what education should not do at least when it functions in a socialist society

which is developing or trying to develop in line with the socialist ideals written down long ago.

On the other hand, the system of education should prepare people for work, enabling them to achieve the highest efficiency and, thereby, increase their productivity, namely, give their contribution to the resources of the community of all people since the majority of mankind still lacks material goods and, especially, intellectual achievements. At the same time people should not be trained only to work and raise their productivity, but also to master the conditions and results of their work so as to eliminate the division of any society into workers and those that are not workers. Members of the latter group, actually, often get their education to avoid being workers. While, indeed, all should be educated to become workers!

For a reader from abroad these concepts can sometimes be confusing. But, we have already put some of them into practice. For example, in Yugoslavia the Social Compact on the New Classification of Professions and Qualifications was signed recently which finally eliminates the division of people according to, on the one hand, the hierarchy of workers' jobs and, on the other, the hierarchy of administrative jobs. Up to the present, in our work organizations, in employment practices, in official statistics and the school system, everywhere, the division has been maintained into workers and those who are not directly involved in production and whom we have called employees, though this has now become a rather vague term. Thus, we have had two hierarchies. The workers' qualifications could have ranged from unskilled workers, then semi-skilled or partially trained workers to skilled workers and that was the end of their development. If such a worker wished to go beyond the boundaries of such a hierarchy (since a skilled worker had no other option but to remain as he was) the only way was to leave his class and continue his education. On the other hand, there has been the division of office jobs or rather of people who performed various intellectual operations, from the smallest and the most ordinary ones to the most complex, into employees with primary, secondary, post-secondary or university education.

In Yugoslavia we are now in the first stage of the implementation of a classification according to

which everyone is, even in his title, treated as worker. The only differences which remain and must remain depend on the characteristics of jobs to be performed so that for more complex operations a higher level of education is required, while the courses offering knowledge of a general type tend to be more or less the same for all. Accordingly, we are all workers with different levels of vocational training, depending on the nature of the jobs we are to perform within our professions.

The changes which the system of education is undergoing in Yugoslavia could be summarized as three processes: the process of de-etatization of education, the process of democratization of education and the process of de-schooling of education.

I would again mention Marx, who saw among the tasks of the future society which he, as a revolutionary, was struggling for and which was to replace bourgeois society, the task of taking away from the state its role of educating people. Namely, bourgeois society separated school from the church, though, it also isolated school from the factory. Socialism (which continues to build on the achievements of bourgeois society in the sphere of education) takes a step further. Obviously, a reunion of school and church is out of the question as it is, historically, *ad acta;* therefore, uniting school and factory becomes the current objective. However, a no less important task of socialism is to separate school from state. Here, such a practice is gradually gaining momentum with the state no longer legally regulating the field of education to the extent that was the case in the model bourgeois state, e.g. the French Republic. There the questions used for final exams in secondary schools are still kept in special safes, being considered state secrets, and are prepared in state ministries. We are far from such practices. With us, the state has not only given up drafting examination questions, but we are — ministers for education — without any power in education, and this fact makes us really happy. We can neither assign teachers by decrees, nor impose curricula on schools, nor decide, on behalf of the state, about resources to be spent on education. The state cannot do this. It can no longer allocate budget funds for education, nor is it its responsibility to adopt educational programmes or resolve pedagogic issues; it cannot even resolve matters pertaining to labour

relations in the sphere of education. All this is now governed by socialist self-management principles, and this is the process of de-etatization.

Not a less but, rather, a more important feature of the de-etatization process is the financial component, i.e. the fact that funds are no longer obtained by taking over the surplus value from material production by the state which further allocates it, on the basis of various criteria governing its budget, its funds, and its legislation, to education, culture, science and other "non-material", namely, nonproductive spheres of society. For a long time now it has been our practice to raise such funds through agreements and negotiations between those who generate surplus value and those who work in education, science, culture, etc., i.e. apart from the sphere of production, through the free exchange of labour. Since the exchange of labour may also mean market exchange, it should be noted that when we use the term we have in mind a direct exchange of resources and programmes between the producers from sectors of material production and employees supplying society with intellectual services, without the distribution of resources by the state and without subjugation to the play of free market forces.

Related to this is the process of the de-commercialization of education. In Yugoslav society there is still a lot of commercialized education. On principle, education in general is free of charge. However, some forms of tuition still persist or have been reinstituted. There are still many practices in the relations between educational institutions and other work organizations which may be considered as trade, i.e. market behaviour. The elimination of these, by the free exchange of labour itself, is just as important an objective as the objective of de-etatization.

Accordingly, it is our goal to reduce market effects upon education and to eliminate, in the historical sense, the production of a hired labour force and the situations in which a person, if provided with a certain level of education, becomes a private owner of the knowledge which he takes to the market for those who want to buy it.

And, finally, there is the process of the de-schooling of education. Under the specific conditions of Yugoslav society, to get away from the increasing ineptitude of contemporary school, we must overcome

its aspirations to organize the whole process of education, hold it under its control and confine it to itself. The process of education must be expanded to include working environments in the society while assigning them an important role. In other words, the factory — symbolizing all that is not school — and by factory we mean all work associations in the society — must be given a much more prominent role in the process of education, which will gradually lead to its advantage as compared to school, an inherited institution.

This, then, means that courses will be given not only by "old-type" teachers but also by experts from associated labour. That is to say that all forms such as theoritical exams, practical training, self-education in various sectors of social activities should be built into the places where people work and live and not simulated in an institutional process of education in school. On such a basis we must establish the links between the requirements of the sector of education and the demands of society for education, namely, we must identify and implement educational programmes not only having in mind the requirements of school but of society as a whole, and especially of what we call organizations of associated labour, i.e. all work associations and associated labour in general.

It is our intention to incorporate in the school education of children and youth as much practical training as possible in labour environments, not for the purpose of mere drilling but with the aim of enabling young people to learn, from their very childhood, how to work, and how to earn their living and of offering them chances to develop a creative and productive personality, instead of becoming — and this is what is threatening youth everywhere, our society included — perfect and insatiable consumers whose ambitions can never be statisfied but who are, at the same time, poor producers, simulating work and neglecting their duties. Otherwise, we schall have to face the escalation of a consumer civilisation with all its paradoxes and extremes some of which we are, already, encountering today, especially among young people.

Over the issue of the introduction of work into institutional education we are waging a difficult struggle in Yugoslavia. An even more important aspect of this struggle is the introduction of education into

working life. And now we are approaching the idea of recurrent education: all people in various professions should acquire education while working so that the process of education becomes an integral part of the regular process of work in society, in all places where people work, whether it be production, services, manual or intellectual jobs, etc. This is where, in Yugoslavia, the concepts of permanent education and recurrent education have emerged, and we insist upon them as the main guidelines for future changes in the development of education.

We also believe that people should not adjust themselves to existing working conditions, existing techniques and technologies and the current organization of work, but should change them. And if we admit this, then permanent education or continuing education must exist and must become part of the process of work and life. Let me paraphrase: in the same way as we say that one lives as long as one breathes, it should be said that one learns as long as one lives, especially during one's working life while carrying one's share of labour in human society.

I share the opinion of some authors that what is called recurrent education, is more or less identical with acquiring additional qualifications while working. Recurrent education should become a right, an achievement and a real chance of all and for all members of society encompassing equally both vocational training and general education, i.e. knowledge in the broadest sense; namely, education as professional specialization or gaining new qualifications and education which is, simply, an expression of the human need to know more and to lead a richer intellectual life, developing creativity instead of devoting energy only to consumption and prestige.

We could even think of changing professions like shoes. This has actually become an increasingly applied practice in the modern technological division of labour. It would be wrong, reactionary and conservative to base the system of education only on life-long qualification for one profession. On the contrary, there is a growing need to provide basic education for the majority of people so that they can, according to the situation, quickly modify the quantity of their vocational training and change from one profession into another or move, horizontally and vertically, within the pattern of professions.

In this connection, recurrent education plays a very important role or even the key role in supporting this professional mobility which becomes a growing necessity. However, it should not be based on the logic of escaping one's profession for the purpose of career building, but rather on merging individual and social needs so as to avoid adjustment of individuals to the inherited division of labour. The idea is to establish conditions in which an individual would creatively promote organizational and technological processes and decide with others, following the principles of tolerance and self-management, on all modes of his own and of social activities.

Furthermore, I would like to remind that recurrent education should not be understood as going back to school. The methods and forms of recurrent education must not tend to interrupt work processes, i.e. confine people again to schools which are now, for the most part inflexible and impotent. We shoould also avoid the use of recurrent education only as the means through which schools will obtain additional resources by selling new certificates, additional courses, and diplomas, or through which a skilled worker, who might have very good results, changes into a bad engineer who wouldn't know what to do with himself in our present organization of work, etc. Therefore, recurrent education should not be methodologically based on the return to school but, on the contrary, it should be organized in the environment that comprises both productive work and engagement in social activities.

In the same manner, recurrent education should not be considered as private, i.e. the means for satisfying the private interests of individuals which are neither coordinated nor linked with the needs of their work organizations and social environments since this could also become a source of crisis not only in education but also in society at large.

Therefore, I believe that the main protagonist in the field of education is associated labour and that educational policies should be devised, primarily, by it and not by schools or universities. Naturally, cooperation between schools and universities, on the one hand, and factories and all other entities of associated labour on the other, as well as their joint effort in the implementation of recurrent education are indis-

pensable. However, although this fact remains, it is another matter to stress, as I have just done, that school, which is based on the principle of traditional selling of its educational services, must not be the protagonist of recurrent education.

THE UNITY OF EDUCATION AND WORK AND RECURRENT EDUCATION

Dr. Mato JERGOVIĆ

The changes in the educational system, initiated in 1975 with the introduction of common programmes in the first and second grades of secondary school and of new programmes in the so-called final stage of secondary education, in which — for 1 or 2 years — pupils are vocationally trained and prepared for further education, opened the process of overcoming the dualism that had hitherto existed in it.

Since secondary education suffered most from the various shortcomings inherited from the old social system, such as dualism, separation from work, and the like, the emphasis of the changes carried out so far has had to be on secondary education. However, these changes are only the beginning of a sweeping reform of the whole educational system, aimed above all at abolishing its inherent contradictions, and at socializing education by making it an integral part of the system of associated labour.

The preconditions for this change have been created through the establishment of new social relations based on socialist self-management and the development of self-managing unity between education and work. An essential part of this development is the establishment of new socio-economic relations between education and work, i.e. relations based on a direct and free exchange of labour and the association of labour and resources. This is the pre-condition for the association of the spiritual and material production forces as well as for the creation of a system in which associated workers manage the whole pro-

cess of production and the results of their work, including the social superstructure and education as a special sector of society.

The changes in the educational system, which are only the introduction to a further change in education, are the natural continuation and consequence of its past development. We are referring especially to curricular and quantitative changes following the Second World War, the establishment of schools with practical training, and the gradual raising of the educational level of vocational schools, the establishment of compulsory eight-year elementary schooling, the introduction of technical training and production work in secondary schools, the setting up of shool centres and centres for education in working organizations, and of two-year general secondary education as the common preparatory stage for the training of skilled workers and technicians.

However, though it follows — in a sense — the earlier changes in the educational system, the socialist self-managing transformation of education, initiated in 1975, has introduced a new quality into the development of the educational system in Yugoslavia. Its aim is not only a further pedagogical improvement of the educational system, but a more radical change made possible by its new position in society. In other words, the current reform is not only of a pedagogical nature; it is a far-reaching social reform aimed at overcoming the basic contradictions of the inherited social relations, which are the cause of the current contradictions of the educational system.

The Basic Contradictions of the Past Educational Development

The development of the class society, the consequence of the development of production forces and of a system in which some people distance themselves from work, living instead by appropriating and managing the work of others, produces a social division of labour: intellectual and physical work. This creates conditions for social inequality, which Marx describes as the result of a situation in which "the division of labour makes it possible for spiritual, intellectual and material activity -- pleasure and work, production and consumption — to belong to different individuals.

Their conflict can be prevented only by abolishing the division of labour."[1]

At the beginning of this broad social division of labour, human work still contains both the physical and the intellectual component. A craftsman, for example, manufactures the whole object and thus exercises not only his physical abilities, but his intellect as well. However, this universality of work disappears — in part-in cooperative work; the definitive and total loss of man's independence and his spiritual impoverishment starts at the first stage of manufacture, where work is divided into individual operations and procedures, each of which is carried out by a different person, to be completed in the capitalist factory. His movements determined by the rhythm of the machine, man becomes a complementary part of the machine and an incomplete being, because his work requires the use of only a part of his abilities, mainly physical.

Such a division of labour led to a complete separation of the intellectual from the physical side of work: the one-sided chanelling of physical abilities made man dependent on external conditions, determined by the rhythm and work of the machine. In a class society, then, man is alienated from his essence, because he is alienated from his work. This alienated labour, which "alienates from man his own body and from the nature outside him, from his spiritual and human being"[2] is in contradiction to man's nature, i.e. with his generic essence.[3] This division of labour, which condemns individual people or social groups born under certain historical conditions to a certain kind of job and restricts their activity to one kind of work, "creates specialization and trades, and with them the idiocy of profession".[4] As a consequence of the division of labour into intellectual and manual workers, "intellectual work, quantitatively much less important in the capitalist factory and in capitalist production in general, becomes superior to manual work in terms of wages, prestige, decision-making authority",[5] in the management, control and organization of work. This dualism and disparity between intellectual and physical work is reflected in the field of education as the dualism between the general and the professional, the professional-theoretical and the practical, and between work and education in general.

The basic characteristic of the class society is, then, bipolarity based on the division and oppositions

between labour and capital, producer and manager and the base and the superstructure; in such a system, production and education, though interdependent and linked by their very nature, appear as two separate and mutually alienated wholes. Since work and training for an activity are two basic needs in human life, and indeed reflect man's very nature, it follows that this division between work and education is unnatural to man, except when the education of people who exploit labour is in question.

Institutionalized education, i.e. schools which are part of the function of the state as protector of a privileged class of people, was created and developed in order to preserve and strengthen social relations which, on the one hand, ensure the privileged position of the ruling class and which create, on the other, the necessary work force. Despite the significant quantitative and qualitative changes in education in the early and mid-twentieth century, including an obvious progress in its democratization which came about under the influence of technical progress, schools are still controlled by the state. By financing education, and by determining educational objectives, plans and curricula, the ruling class has retained a monopoly over education, with the state appearing as mediator between labour and education.

Separated from life and labour, the educational system has been getting into increasing difficulties as regards the needs of labour and has been continuously criticized for lagging behind and not satisfying the growing and new demands of society. Trying to meet the demands of pupils and their parents, while at the same time being rightly criticized for its inadequate response to the requirements of labour which do not coincide with the wishes of pupils and parents, the school has become the scene of continuous conflicts. Instead of trying to solve problems by cooperating with the world of labour, the school has resorted to even more selective criteria for pupil admittance, in order to preserve a situation in which it enjoys state protection. This policy plays into the hands of the capital and state bureaucracy, which thus ensures the recruitment of a sufficient number of workers for simpler and more menial jobs from the ranks of pupils dropping out of school at various levels. It is out of the need for further training of

these workers that on-the-job training has largely developed.

Consequently, if education is a function of the state, i.e. of the ruling class or of a privileged social class divided into a base and a superstructure, it cannot be much more than an activity of special state interest — an institution separated from labour. It is in this division of society, which has resulted from the division between material and intellectual work, that we have to look for the causes of dualism in education. The difficulties of overcoming it, therefore, do not arise from inadequate pedagogical solutions or from sluggishness in changing the educational system, but from social relations based on the opposition between the ruling minority and the subjugated majority. Solutions must be sought in the abolition of such social relations, in the liberation of labour and the disappearance of state mediation between labour and education.

In a social system in which production and education are separated and where the educational system is marked by dualism based on the division into physical and intellectual work, education is divided into "regular" education and education at work. Schools within the regular system of education are considered "proper" schools, while schools for adults are considered a substitute for regular schools. This interpretation results from the fact that they are generally attended by people who were not able to finish school within the regular system. Moreover, the very fact that most schools for adults are night schools and attended by workers after working hours, and that some students have to pay for the tuition themselves, indicates that the combined load of work and study cannot be conducive to results comparable to those achieved in regular schools. This is compounded by the fact that the organization and teaching methods of such schools are modelled on those in regular schools for the young.

Furthermore, the education of adults through various courses and seminars is usually aimed at training internal qualifications, which are not generally recognized elsewhere; also, it is usually poorly financed and understaffed. Thus, adult education has so far developed as a parallell and separate educational system standing somewhere in between the system of education. Its curricula have not evolved from the

need of unity of work and education but have — in most cases — been adapted from regular school curricula.

Like other programmes of education at work, recurrent education is largely a compensational form of education, i.e. an education which reduces the generational differences in education resulting from improved schooling of the young. As a from of continuing education, recurrent education provides — in part — training for the increasing complexity of life and work brought about by technical progress. However, this is most often not the most important task of recurrent education. The immediate value and great significance of recurrent education lies in its being part of the traditional educational system. But since that system forms part of a separate sector of society, i.e. of the social superstructure, recurrent education continues to remain outside production.

Linking and Associating Production and Education

Traditional solutions of linking work and education are one-sided, not only because they are implemented in a system where education is separated from work, but also because they are aimed at providing better training for the necessary work force. The development of work habits and technological training, accompanied by a limited amount of general education — which in turn means a limited possibility of further education for workers — serves much more the needs of divided labour than the universal development of the trainee. This is especially true of the technocratic approach to linking work and training, based primarily, as it is, on the compatibility of education and training with the technological requirements of work.

The practical solutions of linking education and work, evolved in the bourgeois society, have been used in socialist systems as well. The ideas of a new system of education, as spelled out by Marx, Engels and Lenin, were put into practice only with the introduction of socialist self-management, when the necessary preconditions for the unity of work and education were created. In this, an important role was played by the 10th Congress of the League of Communists of Yugoslavia and its decisions; these recognized the

need for strengthening socialist self-management and bringing about radical changes in the system of social reproduction and for creating economic, political and social conditions for a system in which the working class would decide on the results of its current and past labour. This is the essence both of the abolition of a class society and all forms of subjugation and alienation of man, and the establishment of a society of free association of producers, i.e. of the society of liberated labour.[6]

In the new social relations, education cannot be a separate activity divided from labour. Like science, culture, health and social activities, it must be integrated into the system of associated labour. This is the prerequisite for the constitution of associated labour and the creation of conditions in which the working class decides about social reproduction; at the same time, it is the precondition for the constitution of education as a part of that integral system.

In the new integrated system of associated labour, i.e. in the society of free association of producers, all divisions between education and work inherited from the bourgeois society must disappear. This presupposes a qualitative jump in relation to established forms of linking these two fields. A linking implies contact between two wholes at certain points where some partial interests coincide, e.g. pupil work practice, which is in the interest of both the school and the factory.

Consequently, the association or integration of the entire educational activity into associated labour transcends various forms of partial linking between the school and the factory, which so far has been either a pedagogical objective and means of education or a direct need of labour. What we are doing now forms part of the development of an integral system of production and education in which "... the surplus of labour as a socio-economic category, i.e. as an element of class relations among people, ceases to exist, because it is now under the control of workers who have produced it as part of the total value; the material results of managing this value are reproduced only in the income of the basic organization of associated labour, managed by the workers".[7]

This development creates the necessary conditions for a rational and effective social and cultural superstructure, which will in the first place serve the

interests of the working class.[8] This applies to education, whose material development, as in the whole social superstructure, is now based on the free exchange of labour between workers and direct production, and direct production and workers in the so-called social activities. As E. Kardelj stresses, it is the beginning of the abolition of the political monopoly of the state in the field of social superstructure: "... (this monopoly) enabled the state, representing the interests of the ruling class, to be the only arbiter in relations between material production and the social superstructure and to determine the transfer of funds from material production to the field of the so-called social consumption, i.e. to the sphere of social activities".[9]

Therefore, when the need is emphasised that workers in associated labour should be the main decision-makers about the social superstructure including education, this does not mean that education should simply be subjugated to the technological demands of production. The development we have in mind certainly does not refer to labour which would retain the characteristics of capitalist social relations. Such an integration would be based on a technocratic approach to education and would represent a dehumanization of education and a step backwards in relation to the already achieved degree of humanization of education in socialism.

The unity of education and labour, based on socialist self-management and the liberation of labour whose aim is to establish new relations in production, does not imply, then, the persistence of old capital-labour relations, but requires a knowledge-labour relation, which cannot be achieved by a mere subjugation and adaptation of education to labour. Labour itself must be changed, by abandoning an organization geared to profit-making and therefore based primarily on technological profitability of production, division of labour, economic efficiency and the adaptation of man to work. By adapting to such a divided labour, the worker is reduced to partial labour, thus becoming a partially developed being. His abilities develop one-sidedly. In such a system, the worker's creativity and versatility is not only undesirable but is even considered damaging for the technological process, which is worked out in special offices on the basis of the latest scientific and technological developments.

By contrast, the introduction and development of socialist self-management leads to the abolition of alienated labour, transforming it into liberated labour of free producers in organizations of associated labour. This in turn creates the preconditions for a different organization of labour, i.e. for an organization of production aimed at producing not only material values but new human values as well. The new social relations make it possible to abolish the division of production into creative and executive work, skilled and unskilled work and the division of people into managers and producers.

This change of labour and its transformation from a power beyond man into a power serving his many-sided and free development cannot be achieved by maintaining a situation in which enterprises have only one function, namely production. In order to make possible the free development of man in a working environment in which he can find self-actualization as a creative being, working organizations must develop all those functions which will ensure the transformation of man into a master of work. A precondition for such a development is an organization of management in which workers decide about income as well as about general social and personnel reproduction. In this, the development of educational functions in organizations of associated labour plays an important role; they include the planning of educational needs and profiles, the programming of education, and participation in the realization and evaluation of educational programmes.

At the same time, schools, which are more or less a legacy of the bourgeois society, must also undergo important changes. If the unity of education and work is to be achieved, all schools must build work into their curricula as an integral part of learning, i.e. the acquisition of new knowledge, skills and habits. Education and training for work, through work, at work and from work, together with a variety of new programmes and teaching methods, must become the new basis of organization in our schools.

In the new system of education, a new socio-economic position for students must be established; the student must become the direct link in the self-managing association of production and education, and a responsible factor in his or her development and social progress. Young people can thus play an active

part in their education. Consequently, in the new system of education, young people become members of associated labour while still at school and thus their social security stems from their relationship with associated labour and is based on their participation in the creation of the social income. In this way school-goers develop from pupils who learn and work into workers who learn by working. Work and education, which will alternate and supplement each other during a person's whole lifetime, will become their personal characteristic. Participating actively in work and education, students become self-managing subjects in both activities. They represent the particular and general needs of labour and of society, individual and social interests and thus become the most concrete protagonists of the association of labour and resources.

At the same time, this must become the basis of the workers' right to education and continuing education during their entire working life, the corner-stone of mutual rights and obligations of students and organizations of associated labour, thus concluding the "labour exchange". The right to education financed by associated labour thus depends on the assumption of responsibility towards associated labour. This presupposes the development of such a socio-economic position of pupils and students which will determine the mutual rights and obligations of pupils and students on the one hand, and of associated labour on the other. In such a system the acquisition of knowledge will not be based on coertion or on a race for good grades. The unity of education and production and the new socio-economic position of students will bring about the liberation of education.

The Unity of Education and Work, and Recurrent Education

The new educational system, based on the unity of production and education, has led to a different concept of education at work and of recurrent education. This type of education can no longer be based only on integration with associated labour, but must become an integral and essential part of the overall educational system.

This new position and role of education at work and of recurrent education in the educational system

stems from the fact that now even the so-called regular education, i.e. education for the first job, must be carried out through combined study and work. This applies both to higher education for the increasingly complex conditions of life, and work.

In the new educational system, the educational process will no longer consist of a progression from one grade to another or from one school to another. It must depend on the results achieved in the process of work and not only on previous education. The rapid development of science and technology makes it impossible to divide a person's lifetime into a period of preparation for work and into a subsequent period of work. The traditional school, which tries to bestow upon the pupil all the knowledge necessary for life and work, thus becomes an obsolete institution. This is one more reason to build an educational system in which man can learn throughout his working life, i.e. a system of education and promotion in which people will learn while working and work while learning.

Consequently, the new system of unity of education and production presupposes solutions which will ensure that education and training for the first occupation include preparation for permanent education. In this way people do not return to education — they remain students even after leaving school.

Instead of two worlds, a world of study and a world of work, we are now building one world — the world of permanent education and work.

Since, in the new united system of production and education, the working man does not "go back" to education, (because by entering the world of work he has not left that of education), the question arises of the continuing existence of recurrent education as a separate form of education. The relation of work and education may be simultaneous or successive, depending on the predominance of man's activity in work or in education. But this is a question of the organization and methods of the new system of education, which cannot be identified with the on-the-job training of the traditional educational system. In the old system, in which education and production were two separate activities and where there existed a division into formal education and education at work, recurrent education was rightly conceived as a separate educational activity alternating with work. This

concept loses its *raison d'être* in the new educational system.

It goes without saying that the positive experience of recurrent education, especially its content and organizational solutions, will continue to be applied and improved in the development of the new system of unified work and education. This is all the more necessary because they are aimed at an integration of education and production. Consequently, the unity of education and production does not imply the abolition of recurrent education, but its transformation into a new quality of simultaneous education and work as the basis of the whole educational system.

NOTES

1. Marx, K. and Engels, F., *Rani radovi* (Early Works). Zagreb, Naprijed, 1961, p. 299.
2. *Ibid.*, p. 217.
3. Bezdanov, S., *Tehnički progres i obrazovanje u Jugoslaviji* (Technical Progress and Education in Yugoslavia). Beograd, Stručna štampa, 1975, pp. 44—45.
4. Marx, K. and Engels, F., *Op. cit.*, p. 299.
5. Šuvar, S., *Škola i tvornica* (School and Factory). Zagreb, Školska knjiga, 1977, p. 19.
6. *Deseti kongres Saveza komunista Jugoslavije: Dokumenti* (The Tenth Congress of the League of Communists of Yugoslavia). Beograd, Komunist, 1974, p. 177.
7. Kardelj, E., *Pravci razvoja političkog sistema socijalističkog samoupravljanja* (Development Trends of Political System of Socialist Self-Management). Beograd, Komunist, 1977, pp. 16—17.
8. *Ibid.*, p. 19.
9. *Ibid.*, pp. 19—20.

RECURRENT EDUCATION AND SOCIAL EQUALITY

Dr. Milenko NIKOLIĆ

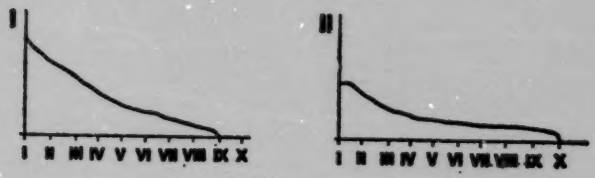
The objective of this contribution is to review the implementation of the concept of recurrent education from the standpoint of the integration of all young people in the world of work.

Our civilization rests on jobs of the lowest complexity. The material basis of civilization was built through work on the least complex jobs. The edifices of Egypt, Athens, Rome, the grand sacral structures of the Middle Ages, are all creations of labour of low complexity. We must not forget that these were epochs of unscrupulous exploitation of the dehumanized individual. At these times, out of the hundred thousand or million people performing jobs of low complexity, there were only one or ten people doing jobs of somewhat higher complexity according to our modern criteria.

The development of civilization is, in fact, the liberation of mankind from the least complex jobs, the substitution of human work on these jobs by the work of animals or machines. While in ancient Egypt millions of people spent their whole working life transporting stone blocks and other material for the pyramids, such work was later replaced by the work of animals, and still later — machines. The emancipation of man from jobs which can be done by animals and machines is undoubtedly a significant component in favourable socio-economic conditions for humanizing man's life and work.

A significant characteristic of the development of society, and in a sense, a measure of this develop-

ment, is the shift of human labour from less complex to more complex jobs. Unfortunately, we do not have at our disposal data which could directly serve as evidence of this thesis, but the available data, modified for the purposes of our paper show the shift of human labour from less to more complex jobs. Charts I and II show this shift of human labour from less to more complex jobs. Chart I illustrates the beginning of this century, and Chart II the 1970's.



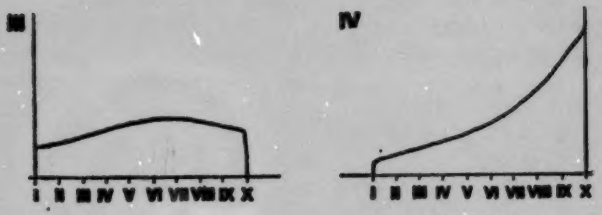
In both cases the sum of the ordinates which correspond to various degrees I, II, ... X is constant, and actually amounts to 1.000. It is seen that in Chart I, the larger part is taken by less complex jobs, while in Chart II, as compared to Chart I, the values showing less complex jobs are smaller, and those showing more complex jobs larger.

Inevitably, we must raise the question: which trends can be expected for the future?

Broadly available and also generally accepted data show that today, more than ever before, under the conditions of a scientific-technical and technological revolution, we are in a situation where human labour is being replaced by machines. Which spheres of human labour are "attacked" by machines? These are primarily jobs of the least complexity. They do not include only manual work. Mental work is also being replaced by machines. It is interesting to note that machines replace people on jobs of the lowest and lower complexity (simple computations, simple mathematical and logical operations, etc.).

It is to be expected that human labour will continue, increasingly, to shift towards jobs of higher complexity. Chart III gives our forecasts for the distribution of human labour according to degrees of complexity at the end of this century, or three of four decades later. We are ready to believe that

human labour on jobs, treated as jobs of lower complexity today, will disappear, and that people will predominantly perform jobs of high complexity. Such an assumption, which may become a reality in one or two centuries, is shown on chart.



After these futuristic views we must return to the present. Our contemporary circumstances are characterized by the fact that a significant number of less complex jobs exist in almost all spheres of human labour. From this derives the obligation and need for preparing young people for such jobs. By whom and how? — we shall answer in the following theses, after we first discuss some other theses of relevance to these questions.

One of the fundamental questions raised by our contemporary development and one of great importance for future development is at what pace human labour should be replaced by machines. True, there still is the opinion that our development should be based on the technology of low complexity jobs, i.e. on mass employment of workers on jobs of the lowest and low complexity. This means low productivity and, in turn, a low standard of living, which would lead to permanent dissatisfaction. Therefore, advocates of technology of low productivity, i.e. technology based on jobs of low complexity, uphold this position for the purpose of achieving a specific aim, and we shall not here discuss the "halting of technological development", as it is absurd.

There is currently a dilemma as regards the pace of replacing low complexity technology by technology of high complexity, i.e. the automatization and semi-automatization of production. There are theoretical questions about the possibility of "jumps" in the promotion of technology. However, our development is much more affected by the conflict between sophisticated technology and employment. We are obses-

sed by the problem of employment in the classical manner, and many problems are solved to the detriment of technological advance, i.e. in favour of unsophisticated technology, which means higher employment. When, in our country, discussions are held on an industrial facility which should be built or modernized, the number of employees in that facility is a significant criterium. If it will employ a larger number of workers, it is more favoured. This fact stimulates the use of unsophisticated technology. For instance, factories have been built based on a technology employing 300 workers, even though elsewhere in the world there are factories producing the same total product and revenue with only 30 workers. In order to achieve equal product competitiveness we must count on living standards 10 times lower, in simple terms. The option for unsophisticated technology with high employment only fictitiously solves the problem of employment. The real solution is in sophisticated technology, and this means low employment in production. Sophisticated technology primarily eliminates jobs of low complexity, and this fact is of importance for the topic we are discussing.

If we adopt the orientation toward the smallest possible number of employees in production, we must raise the question: where will the armies of young people who are finishing school be employed? Up to now, the answer has been found in direct production with a low technology, on jobs of low complexity. We have seen that it is not the better alternative for a society oriented towards faster development. Realistic visions of development should incorporate real possibilities for full employment.

We should expect the occurrence of industriomania, i.e. the perceiving of progress only in construction and on the basis of industry. When our country (primarily bearing Vojvodina in mind) eliminates all industry not based on domestic raw materials and semimanufactures with minimum energy consumption, the community will be free from the most serious problems. The criteria: domestic raw materials and semimanufactures, minimum energy consumption and the minimum number of employees will enable industry to attain, with 20 — 25 percent of all employees, the revenue it now attains with 39 percent of all employees. We must reiterate that this is industry with sophisticated technology. If we accept the opinion

of many authorities that in the period various forms of tourism with catering, entertainment, recreation and other forms of spare time organization will be particularly developed, and that the number of employees in these activities, will, by the end of the century, equal the number of employees in industry, then we have identified a hitherto insufficiently considered sphere of labour and employment.

Let us mention here the forecasts with which many experts and scientists in the field of development agree: by the end of the century, every fifth employee, i.e., about 20 percent, will work in scientific and research activities.

Agriculture organized in a modern manner, should employ, under Yugoslav conditions, cca. 13 percent of all employees.

It is necessary to add to this exceptionally favourable conditions and the expressed need for the development of transportation. Means of transport, understood in the broadest sense of the word, are a precondition for progress. In Yugoslavia this refers to roads, railways and river traffic which, organized and built at a modern level, can be a source of revenue and employment. I shall not attemp to analyse other activities, as our only aim is to illustrate other employment orientations than those with which we are at present predominantly preoccupied.

However, it is also necessary to add that not only labour also the position of the individual and relations between workers in factories will change — that they will become humanized. In order to achieve this, in addition to experts for the process of production, sales, etc., factories and other organizations of associated labour will employ psychologists, sociologists, cultural anthropologists, experts on safety at work, experts for the improvement of the working environment, and health care experts, which will considerably change the professional structure of the staff, and also have a significant influence on the planning of educational needs.

Let us return again to the main topic — employment and education for jobs of low complexity. We are convinced that such jobs will exist for some time longer, and it is necessary to plan and prepare workers for these jobs. For the moment we shall discuss only the question: who should be selected, prepared for and employed on jobs of low complexity?

We must recall that they used to be those who left the educational system at a certain stage, sometimes called "drop-outs". It is important to bear in mind the reasons for "dropping out". In the old system, nearly without exception, these were children from poor families, and from various local and other geographical, social and national milieus of poor material standing — children of workers and poor peasants. In the system of socialist self-management, this category is constantly decreasing due to greater social concern. The other category is comprised of all those who leave schools for various reasons. We do not know of those who choose these jobs (sometimes called "dirty jobs") out of love. Young people and adults have been driven into these jobs by necessity. Rare are those who are satisfied at doing these jobs. They are, actually, the most closely-knit group of the dissatisfied, because jobs of low complexity also pre-determine a low earning power and social status.

In countries with a highly-developed economy and a high standard of living, those who accept these jobs are rare. The problem is solved by the possible replacement of people on these jobs by machines, and at present it is being solved by the "import" of labour from underdeveloped countries. We have a similar situation in our developed regions as compared with the underdeveloped ones.

A fact, which does not require proof is that young people in Yugoslavia do not choose jobs of low complexity. Reasons for this only seemingly new phenomenon are being sought. The answer is simple. The reasons which forced a part of the previous generation to work on low complexity jobs and enabled the other part to move towards the top have disappeared. In its constant ascent, Yugoslav socialist self-management society has reached the level at which one of the greatest achievements of all progressive societies is being realized — progress in education is ensured for young people only according to their work and abilities. Yugoslav society is organized so that the material conditions of the family and environment are no longer an obstacle to advancement, and school is organized so that each child, each young and adult person can, by his work, make progress towards the desired level. There are those who criticise the young and the schools for arousing

the desire for knowledge and prosperity in young people. Our opinion is contrary — these are great values embodied in the young generation, inspired by our society, and particularly the new type of school.

We shall just mention another topical issue which is not directly linked with the topic of our discussion. This issue relates to young people's avoidance of the so-called production professions, and their predilection for those such as: administration, finance, law, economics, medicine and others. The answer should not be sought in errors of the educational system and pedagogical work, i.e. vocational guidance which "does not explain in a satisfactory manner to young people the possibilities and needs of employment". On the contrary, youth is well informed. In our society, bureaucracy still holds a strong position, not only in governing bodies, considered the classical source of bureaucracy, but also in factories and in all other organizations of associated labour, self-management communities of interest and even in socio-political organizations. The professions chosen by a large number of pragmatically oriented young people are the most secure passports for entrance into the sphere of bureaucracy, and through this, a privileged status in society. In spite of clear socio-political decisions and actions, bureaucracy is not decreasing, but rather encroaching upon spheres such as science, art and the like, inhibiting real creativity and proclaiming mediocrities in the service of bureaucracy as true creators. This is a serious social problem, and the present orientation of young people towards certain professions will bear its social effects after a decade or more.

We have agreed that the young do not readily choose jobs of low complexity; however, these jobs must be done by someone. How is this problem to be solved? A possible solution is to return to the old practice of recruiting the children of workers of a certain profession to work on the same jobs. Some see certain advantages in this. Others, however, think that by administrative measures it should be determined which percent of the children of physicians, for instance, should be oriented to jobs of low, medium and high complexity, to avoid the reproduction of workers by workers, and intelligentsia by intelligentsia. There are also people who think that showing poor results in school should be workers and those with

better results experts. And then there are those who think that for jobs of low complexity it is necessary to attract children from poor families from underdeveloped regions. We are of the opinion that *the whole young generation* should be brought into jobs of low complexity. After uniform and equal general education and training for the first job, each young person *must begin his/her working life on a job of low complexity*. We are not discussing the issue of the necessary length of general education, but for reasons which will be explained later, it must be equal and uniform for all. The first job of low complexity is taken to mean those professions classified within the first four degrees of the classification scale, and professional training for this job after general education should last from several months to two years.[1]

The system of including all young people in the world of work, on jobs of low complexity, by their 18th year of life, after which they acquire further education during their whole working life, at and from work, has advantages which negate the validity of any other alternative: a) In this way the problem of labour for low complexity jobs is solved. Depending on their work and abilities some will remain on these jobs for a longer and some for a shorter period of time. b) One of the fundamental issues of social equality is solved; all young people start out in the world of work from the same position. The education preceding the first job is the concern of the individual, parents and society, and after the first employment, the concern of the individual, organization of associated labour and society. c) The young get the knowledge for a certain job (or for a craft/occupation) in a timely manner, as well as *employment*, which is an important factor in their personal security, and therefore their relation to society. The tragic situations which arise when youth passes and the person is not trained for any kind of job are eliminated. d) The serious social problem of young people neither in education nor work, which is most frequently the cause of juvenile delinquency (crime, drug dependence, etc.), is solved. For a good relationship towards work and people in the organization of associated labour a new strong stimulus is gained. It will depend on this relationship, in addition to the wishes and abilities of the individual, whether the working people in an organization of associated labour will send their collea-

gue for further training. f) This system solves problems in planning for educational needs. The classic "labour market" based on supply and demand, reducing people to an ordinary market article — goods — will be eliminated. Organizations of associated labour themselves, but most often associated into larger entities, will send workers for further education only on the basis of the determined needs of the promotion of technology, expansion of capacities etc. This eliminates the disharmony between "the demand of the economy" and the "supply of education". g) Fundamental changes occur in the relations between the educational organizations of associated labour and organizations seeking education for their workers, and these two organizations will regulate their mutual obligations and rights through self-management agreements, which means the consistent realization of the free exchange of labour. Thus, educational institutions, primarily institutions of higher education, will be fully "turned" towards organizations in material production and other organizations for which they educate workers, not only as regards educational needs and scientific and research work but also as regards all questions pertaining to the work and development of these production and work organizations. Educational organizations will become an integral part of the organizations for which they educate personnel, associated and linked in various self-management ways. h) Success in university education will radically improve, the duration of studies will be reduced, and "life-long students" will be eliminated, because students who have obligations towards their working collective achieve the best results in their studies, as modern practice confirms.

There remains the question of whether it is realistic to plan that all members of one generation be included at once in lower complexity jobs. It is realistic. In Vojvodina it is planned to employ about 33,000 workers annually (new job opportunities, replacement of pensioners, the deceased and others); about 29,000 have been employed, and one generation of young people from Vojvodina numbers about 27,000. There are, of course, different problems, such as for instance the unequal distribution of young people and working requirements in communes, etc. All these are issues of a technical nature which can be solved through good organization and regulation (social compacts

and self-management agreements, with specific legal regulations — for instance — the employment of trainees). All this will not cause significantly greater problems than those related to sending young people for their military service before studies, which in its time caused numerous worries, opposition and complaints.

Opposition to this concept is very strong, unfortunately, without arguments which would make polemics possible. In addition to opposition which is a result of techno-bureaucratic positions, the opposition of parents is the strongest. This is understandable. Parents wish to ensure as good and as secure an existence for their children as possible. In the past they left them material goods, which proved to be an unreliable support, not only in socialist societies. People are today becoming conscious of the eternal truth that knowledge is the greatest capital. Therefore, it is understandable that parents wish for their children to gain the broadest possible knowledge and to enter the world of work from the highest educational level. We shall not enter into polemics about the negative aspects of "the child's holding on to their parents' apron strings for too long". We shall mention that in developed countries — (with a high standard of living) children are better prepared for practical life, because their parents allow them to begin to care for themselves and shape their own lives at the age of 18. Parents in our country should understand that they should not be slaves to their children to the end of their lives, because this is not good for either party.

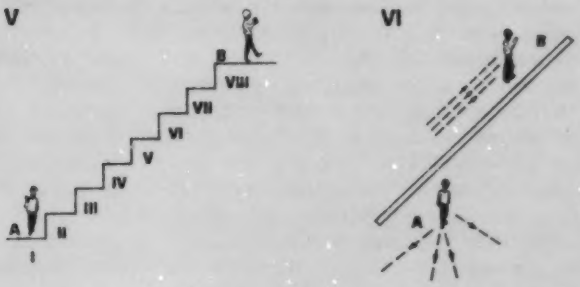
In the context of opposition to the inclusion of the young into complexity jobs, are also remarks that such social choices hamper the development of the talented — scientists and artists. We think that such a system encourages their development. Young people having inclinations towards certain disciplines can satisfy and develop these talents during the whole period of general education, additional training and other forms of educational work. After basic vocational education, they are incorporated into appropriate scientific, artistic and similar institutions, and at once or later, working or temporarily leaving their jobs, they continue their education. What obstacles are there for a young ballerina, musician or painter to be put into a certain job in his/her professional

field at the age of 18, and to be further educated? For instance, someone has a talent for mathematics. S/he has developed his/her capacities during general education through supplementary training, mathematicians' clubs and competitions; in the basic vocational education for assistant researchers in mathematics more than half of the educational work is devoted to mathematical education. After two years of such education, s/he joins an organization dealing with mathematics, or whose work is based on mathematics. Employed on such a job, s/he can continue studies of mathematics at once, and get a doctor's degree in mathematics at the age of 24 or 25. Our opting for a system of incorporating all young people into low complexity jobs was greatly influenced by finding such a system which would stimulate the faster development of talents.

Criticisms of this option often include the remark that only older people will study. We must leave the possibility of studies at this age open, but together with the possibility of continuing education immediately after incorporation into the world of work.

The opinion has been voiced that under our present conditions both possibilities should be left open. One version is that one part of the young generation should continue its education without inclusion into the world of work while the other part should be incorporated into the work on less complex jobs, leaving them the possibility of continuing education, according to their own wishes. Chart V shows two young men. Young man A entered the world of work at level I, and young man B at level VIII. Young man A can reach level VIII, with exceptional efforts, which young man B does not have to exert. We have tried to show these exceptional efforts in figure VI. The inclined line shows their progress in education. Young man B is moving along the upper side of the line, assisted by various forces: supplementary training and other forms of pedagogical assistance, parents, youth and other social organizations, the pupils themselves, society through its concern (and pressures) for better success in school, etc. Young man A is left to himself, and on the picture there are no forces helping him in his progress, but on the contrary, there are those hampering it, they are attached to him, such as: his work at the office, the struggle for his living and working existence, care for the family he may be

supporting, self-management obligations deriving from work, and other social obligations, often efforts and sacrifices in order to ensure money for his education, not enough time for studying, etc.



When we compare the situation of these two young men we have to reject this *new type of dualism in education*, for many reasons — among which humaneness is the most important. This has given support to our thesis *that all young people should enter the world of work from the same positions and achieve progress in education and labour under equal conditions.*

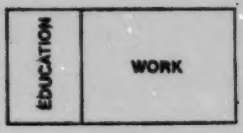
The system of education is adapting to the early incorporation of youth into the work, which is also one of the main recommendations of the 10th Congress of the League of Communists of Yugoslavia. At the 10th Congress of the LCY, held in May 1974, the resolution on the tasks of the LCY in the socialist self-management transformation of education and training calls for a system of education and training comprised of primary and pre-school education, and vocational education at whose *beginning* common bases of general education and training are realized with a polytechnical orientation, followed by a flexible system of educational forms which prepare the pupils concurrently for both — work and continuing education. These are the positions of the Congress, adopted, on the basis of preliminary technical and scientific analyses of our own and foreign experiences, in a favourable political situation when, after the Letter of Comrade Tito, through organized political actions, various opponents of socialist self-management were either defeated or lost their influence on current policy and pubilc

opinion. Only under such favourable political conditions was it possible to adopt a document which is in its progressivity unsurpassed in Yugoslav and foreign history and educational practice.

Without analysing the system inaugurated at the 10th Congress, it is necessary to underline the long-term nature of the option of creating, at the *beginning of vocational training* a common basis for education, which means that all young people in education are placed in an *equal position*. This has encountered and still encounters opposition, primarily by techno-bureaucrats, who do not see human beings in workers, but only attachments to a machine. Even previously there were questions such as: of what use are Gogol and Mozart to a worker? Then for some time they stopped, and now similar questions are raised in new versions, sucho as: of what use is the same general education to a smelter and a mechanic? Techno-bureaucrats are now mostly opposing the creation of the "common educational basis" at the *beginning* of secondary education (first two years). Some most open in expressing their opinion consider that these basis should be carried out at the end of the secondary education, i.e. before enrollment at the university. The objective of avoiding the completion of common educational basis at the beginning of vocational training is that as few workers as possible get this basis, because, as is understandable, the number of those involved in education decreases depending on the educational level. (The fear of educated workers is not a specific feature of our techno-bureaucracy.)

However, on this occasion it is also necessary to emphasize that equal and common general education is of crucial importance for the equal conditions of all working people and citizens (the general level of education is an exceptionally significant condition), for social life, particularly for exercising self-management obligations and for the realization of their cultural and other human needs. People with broad general culture and education accept innovations more easily, particularly in technology and other spheres of human work, and are the actual protagonists of social progress, as opposed to those with poor general education, who see a danger to their existence in every technological change. These are just some of the reasons which place solid general education at the foundation of the educational system.

VII



7Y 11 or 18 or 24Y

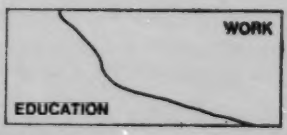
VIII

7Y 18 or 18 or 24Y

Our system is founded on the principle of permanent education. The incorporation of all young people into low complexity jobs presupposes permanent education. After general and basic vocational training (training for the first job) and in-service and on-the-job training, one part of the generation enters university education, which is of a general technical nature, and cannot be longer than two to three years. In addition, working life is suplemented by the constant system of in-service training, professional training, re-training for new technologies, etc.

Chart VII shows the classical system when human life was divided into education and work. Chart VIII depicts the so called sandwich system of education, with alternating periods of education and work. In our opinion, this is not a good system, because the division between work and education is too strict. In recurrent education, work and education are interwoven. So, Chart IX gives a simplified system of the inter-relation of work and education, in which the lower part shows education and the upper work. Chart X gives a modified version of the system of recurrent education, with the realistic assumption that there is no equal division into work and education, so that these relations are delineated by an oscillating curve which, as an "axis", has the bordering curve shown in Chart IX. It is noticeable that the breaking point of this curve corresponds to the 18th year of life.

IX



18Y

X

18Y

Let us conclude: the solution of employment problems for low complexity jobs and therefore of education for such jobs, cannot be found apart from the whole complex of relations in society and the overall system of education and training. Yugoslav society, which has already reached a high level of civilization, humanization and economy, can accept only the principles of equality of all the young people on entering the world of work, as well as of recurrent and permanent education.

PRESENT SITUATION AND DEVELOPMENTS IN RECURRENT EDUCATION

Dr. Ana KRAJNC

If we were to judge the importance of a certain phenomenon by the frequency with which it is mentioned in the media, then it would appear that recurrent education is becoming increasingly important. Looking at the international scene, we can also say that the number of articles, studies, symposia and research dealing with the problems of recurrent education are becoming numerous. All these efforts do not reflect only the personal interests of the researchers but also the wider interest of society. Recurrent education is so complex that only the wider interest of society can help its development. More and more effort is being invested to make recurrent education a systemic solution and a normal way of acquiring education for employed persons, who are set new tasks when they return back to work after having acquired new knowledge.

The Developmental Phases of Adult Education and Recurrent Education

Recurrent education is one of the forms of adult education which appears only when adult education has achieved a certain degree of development and so has the social and economic development which makes adult education possible. Adult education has developed from general educational work to more definite types of education during work (on-the-job education) to recurrent education, which offers new possibilities

for the formative education of persons which is difficult to achieve in the conditions of education during work.

Three phases in adult education may be noted. The first phase reached its summit here at the turn of the century. Educational work among the masses with the aim of spreading general culture was the most popular form of adult education; it had wide aims and, looking back, we can see that "any knowledge was useful". At the time of rural economy, in which the work process was not differentiated, the appropriateness of knowledge was not strictly determined.

The industrial economy speeded up the requirement for knowledge. Various institutions appeared which offered mainly brief specialized courses. The institutionalization of education did not at first give particularly good results in educating adults who had not the opportunities to obtain regular school education. Economic conditions, teachers and the entire organization were not adequate to fulfil such complex tasks. Various courses, seminars and evening lectures were organized. The knowledge acquired in this way was mainly informative and did not change the educational status of those who attended.

Only when the system of adult education institutions had become wide enough did a gradual institutionalized separation of those establishments which offered longer programmes begin. The opportunity to teach school programmes to adults in an adequate manner, after suitable conditions had been created, encouraged the adult educators to take the risk of justifying the absence from work during intensive learning periods of those who were employed and were studying an education.

In the early post-war period in Yugoslavia, when a great shortage of educated people was felt and the specialized adult education institutions were not sufficiently developed, some forms of recurrent education was organized in the regular schools. Programmes were somewhat shortened and a kind of resident education was started for groups of adults, particularly at secondary vocational schools. The great disproportion in age between the regular pupils and the adult groups excluded the possibility of their schooling together. That is why the school for adults became separated. The programme was somew-

hat adapted but mainly to make the learning more intensive, for the material intended for a four year course was to be mastered in two years.

The methods used in schools for the adults remained at the level of classical teaching, implementing mainly frontal work. Everything that was used in regular schools was repeated with the adult learners. Active methods were hardly known. The entire working atmosphere, the regime and the organization was taken over from regular schools. This required considerable adaptation on the part of the learners, as recurrent education made use of methods which were suited neither to their psycho-social profile nor to their socio-economic position. The data show that the learners were completely prepared to adapt to such conditions, even to the infantile disciplinary measures, in order to achieve their goal which was secondary school education, a certificate, or a diploma. They had a strictly determined legal contact with their firms or place of work.

In spite of the identical methods and ways of teaching, participants in this type of adult education had no link with the regular school and its population. Even in their halls of residence, they made a special social group. They often formed stable groups of twos or threes, sometimes larger ones; they helped each other in learning and spent much of their free time together. They read and discussed news in the papers together, exchanged scarce school-books and talked about their political commitments and experiences. These informal groups made a most important contribution to the quality of adult education. They helped to overcome the difficulties resulting from the school formalism and its inflexible teaching and low dynamics, which caused learners regress. This was happening in spite of the fact that the secondary education of adults was carried out without contact with the regular schools. The organizational separation was also caused by the great need for people with secondary vocational education but not so much for those with higher levels of education.

At that time, the educational level of the population was still relatively low. There was little need for adults to be educated at high or university level because the means of production and productive relations were not developed... Cases in which an employee would go to University to take a degree were

rare, and if that occured it was the result of individual effort and interest. The organization of university studies and the age of the regular students did not act as deterrents to older individuals who went to take a degree. They would mix with the population of regular students. These older students did not receive any special treatment. They were left to themselves to find their own way, to use their working experience and acquire knowledge, which often resulted in a shorter period of study and in better marks at the exams. They showed great active participation, particularly in seminar work. It was demonstrated that their experience made them more critical with regard to some subjects, that they were not ready to accept everything that was offerred, and that they accepted new teaching material associatively as every topic gave rise to a number of associations in connection with their earlier experience or envisaged future situations which could crop up in their work. The flexibility of higher and university education (individual choice of examination periods, individual distribution and selection of courses, non-compulsory attendence of classes, individual choice of topics for seminar and final papers) enabled them to fit in very well with the regular students during their university education.

Recurrent education at institutions of higher education was not used for the wider societal interest but only for individual cases. Only a highly motivated, capable and independent person could make use of it. Each individual had to solve the problems of his recurrent education for himself, because they were not, and have not yet been, systematically regulated. Only when the programming, planning and organization of the education for those who leave work to obtain it is properly done, when it has been prepared in a special manner and carried out according to a definite plan, will it become accessible to the majority of potential candidates and not only to exeptionally capable individuals.

At present, the educational structure is at the level when a high percentage of the population completes regular secondary education. The requirement for recurrent education as a general social need has been felt at the university level with the result that the problems and dilemmas linked with recurrent secondary education have generally disappeared. The question which arises now is how to construct suitable

programmes and organizational models for higher and university education. Recurrent education at the secondary level in the past required more active and freer education (without the exaggerated school formalism). The present problem is how to organize the recurrent higher education programme into more intensive and concise schemes. Lectures and classes spread throughout the day from morning until evening and the organization of study courses into semesters, with long holiday intervals, are suitable for regular students but not for recurrent education.

Recurrent education requires so many changes in the organization, methods and adaptation of the programme of studies and such a strong link with organizations of work and educational institutions that it must find its place in the statutes of every educational establishment. It is not enough to rely on the Vocationaly-Directed Education Act, which primarily placed, in principle, recurrent education or "education from work" on a worthwhile socio-economic position. Regulations in the self-managing associated labour organizations and in the educational organizations should be harmonized and complementary. Regulations concerning "educational leave of absence" and the way of obtaining it must be linked with the planned models of recurrent education at the higher education institutions and universities. Recurrent education is a part of social change and a form of connection of the educational function of associated labour with the educational function of the school. This is a new form of socio-economic relations.

Typology of Recurrent Education

Recurrent education and education during work, or on-the-job training, are the two alternative forms of adult education. It is characteristic of recurrent education that the employee temporarily interrupts his work and takes an intensive course of education. Education and work interchange successively. After the final phase of education, the person returns to work. He can retain his earlier post (in those cases when the completed training does not change the trainee's qualifications from the ones he had on leaving the job) or he can be placed in a more responsible post if the recurrent education course had a formative

character and his qualifications have been substantially up-graded. A third case is also possible, namely, that after the course has been completed in recurrent education, the person takes up a job in a new profession. With regard to re-training, there is horizontal re-training, which means that the job after re-training remains at the same hierarchical level, and vertical re-training when the job is at a higher hierarchical level.

The kinds of recurrent education programmes and the change of the educational status of persons.

Kind of programme	Educational status	Employment
I Additional schooling Innovational education	no change	Retains the same post
II Higher degree of education in the same branch	change	The same working field, higher post
III Higher degree of education different branch	change	Different working field, higher post
IV Same degree of education different branch	change	Different working field, the same position

Additional Education and Innovational Education

We have already mentioned that recurrent education is a very complex problem from the point of view of finances and teachers. A person taking this form of education draws his salary as he has to cover his own

and his family's material needs. For a person to take up recurrent education causes considerable personnel problems in his work organization. Another person is needed for the temporarily vacated post. If the previous worker does not return to the same job, it is necessary to find a suitably qualified person to take up that job permanently. In spite of this complexity, it would be wrong to assume that recurrent education has so/far been used for formative programmes only. Unexpected changes in the working process, social relations and management, more scientific discoveries, a larger production of knowledge and other similar factors cause unexpected requirements for intensive additional education in various fields. In practice, these programmes include primarily different types of specialization; training for additional working tasks (managing or executive posts) and the widening of innovative knowledge are the most frequent programmes of recurrent education. They last on the average between a few weeks and one year. This type of recurrent education does not change the educational status of the employed person but the results of additional training are obvious at the place of working.

These shorter programmes of recurrent education change the qualification of person only in part. Since they do not enable the person to change his position and his basic activity, the worker remains under the same conditions as before training. There is no difference in the worker's status after he has completed the additional training. The most frequent result of the training is increased efficiency at the place of work as the acquired knowledge is highly functional and applicative in practice. In this way, the worker may earn a higher wage, which is usually the only bonus for the effort invested in additional training within the framework of this first type of recurrent education. However, the acquired additional knowledge may contribute to an improvement in the working conditions, to a decrease of effort for the same effect and to the improvement of mutual relations among the employed.

It is characteristic of Yugoslavia that these shorter courses of recurrent education are frequently devoted to the development of self-management. The workers are being trained for more efficient participation in the self-managing system, for improving their social activity and for developing the new tasks that

self-management entails. They are also being trained so that they can fully understand the wider community problems outside their place of work, the representative system and social organization in general. All across the country, centres for education in self-management are being organized which offer a number of programmes of one or several months in length, many of them including residence. A more comprehensive preparation for self-management takes place in political schools which offer a longer programme, but which do not change the qualificational status of the worker. Political schools also operate on the principles of recurrent education. The participants move to the place where the school operates. They come back home only for weekends to keep in touch with their families and the environment in which they work. Even those who happen to live in the same town as the school are totally absorbed in their studies since these tend to be intensive.

The "self-management schools" do not give a new educational professional status to the participant, but they have a considerable influence on his understanding of social relations and his readiness to take part in social activities. A higher degree of awareness may only be achieved through intensive educational work and effort, and this intensive work is difficult to be achieved in on-the-job-training. The emphasis is still on education, which is required by the major social goals.

Shorter forms of recurrent education include the additional qualification of persons who carry out a certain job without having a suitable education for it. The person was trained for the job at his place of work, but lacks the required theoretical knowledge. This theoretical knowledge is then acquired through an intensive programme of recurrent education. The person retains his old job and the additional qualification closes the educational circle for that job. The participant thus obtains the formal education required for the job and rewoves some negative aspects on the personal level and in his working environment. The initiative for additional qualification comes from the worker himself as this can guarantee job security, general social security and a degree of self-assuredness. His income may also be improved as, in certain working organizations a person without education receives a lower income.

Sometimes the initiative for additional qualification comes from the working organization. This may occur when productivity is lower than expected. In such cases, the pressure which the working organization brings to bear on the workers to take recurrent education courses may meet with resistence from workers who believe that their work is satisfactory and who do not see the point of further training, particularly not of the intensive type of training which characterizes recurrent education. In these cases, the worker experiences recurrant education much more as a duty and less as a right which issues from his work.

The shorter programmes of recurrent education do not offer any prizes to the participants in the form of attestations or diplomas. It is necessary for the workers to realize the real value of knowledge which will help them to change their working practice and alleviate their tasks. Instead of stressing the symbolic valuation of education (documents, attestations, diplomas or titles), they should re-orientate themselves towards the functional appreciation of education so that they immediately connect education, work and life and see the real value of education in that light. The worker who is orientated in this way will be seeking these shorter forms of recurrent education.

The shorter courses in recurrent education have not yet shown any noticeable development, partly owing to the views of the working organizations and personnel departments dealing with such courses. The great expense and organizational efforts which are required by recurrent education appear to them as too great an investment for something which offers no formal recognition, nothing visible that would justify investment into recurrent education of this type.

It seems obvious that, owing to the present educational structure in Yugoslavia, interest is mainly shown for compensational and formative adult education which offer an up-grading of school education and considerable changes in a person's status. The development of recurrent education has shown that, as the consequence of the tendencies described, types II and III of recurrent education (programmes for higher degrees) have been spreading dynamically, while the other types have been developing in a rather restricted way. Thus the social function of education from work has been limited.

Acquisition of a Higher Degree of Vocational Education

The analysis of the first type (additional schooling, additional innovative education) shows certain features of the following types (II, III and IV). The acquisition of a higher degree of vocational education in the same vocation in which the worker had already been trained (type II) represents the most natural continuation of the process of training and advance in one's education.

For this reason, this type of education has always had the highest number of supporters. Previous knowledge and working experience are homogeneous with the programmes to which the trainee is exposed. This enables a high degree of rationalization of the educational process, which is important in determining and planning the time for education; the previous partial perceptions and the experience obtained in the course of years of work are used to advantage in the intensive phases of recurrent education. The educational programme is adapted along these lines to individual trainees or groups of trainees, and certain deviations from the general educational programme for schools can be made; adults do not require explanations meant for children.

The acquisition of a higher degree of education in the vocation which is familiar to the participants from their work experience gives scope to a variety of teaching methods beginning with those which could be used with other types of recurrent education (particularly with types III and IV); the inductive way of acquiring knowledge is a case in point. Individual groups work successfully with the method of conversation and discussion in which each participant contributes to the acquisition of knowledge. These methods help the assimilation of new knowledge in an active way and on a deper level, such that a greater amount of education is gained.

In acquiring a higher degree of education or higher qualification, it is essential that the worker be acquainted with the background of his vocation or branch of activity. In order to understand his work better, he needs information on the social relation between his vocation and other areas of social life. A worker gradually establishes a picture of the wider social relations and conditions in which his branch of

activity or vocation operates. Through working in it even at a low level, by placing his new vocational training in such a context of social learning, he in a much wider sense as it is supported by different associations. If he masters that, he needs no additional effort in order to overcome the gap between "school and file" or between "theory and practice". In this way, there is no need for school knowledge to "ripen" in the course of probation on the job, which is normally required from those who have completed normal school.

The participant in recurrent education soon establishes the connection between theoretical knowledge and its application. There are other reasons why recurrent education, through which the worker gets a higher degree of education in his vocation, is strongly represented and supported by the working organizations. The prospects for success in such cases is more certain that in any other type of education. It is highly probable that a worker who was successful at his place of work (and thus selected for education) will continue being sc after he comes back to work with the newly acquired knowledge. Such sure success cannot be expected when a worker who has attended a recurrent education course changes his vocation either in the vertical sense (type III) or in the horizontal sense (type IV).

When a worker continues his education along the vertical of his vacation (type II), there is some risk with regard to his ability to learn; he may show considerable ability in his job, but it is almost impossible to obtain an insight into his capacity for further education. His learning habits and techniques can be discovered only when the first results in the process of education are obtained. It is particularly difficult to come to a conclusion when the worker carries out some relatively simple task and has achieved only elementary vocational skills. An insight could be obtained by examining his interests outside his place of work, such as his cultural habits. The working and educational capacity of a person sent to an educational course from work is very important, for success depends very much on these two factors.

Higher Degree of Education and the Change of Direction

The risk with regard to the educational capacity of a person is also present when deciding who to send on courses in the other types of recurrent education (types III ind IV). Education always entails an effort; it is difficult when it is carried out over a long period during work, but especially so when it is carried out intensively in recurrent education where the assimilation of knowledge is effected in shorter periods. Insufficiently developed habits and techniques of learning frustrate advance even with highly motivated individuals. When it is in the interest of a certain working organization that certain workers should undertake recurrent education but they lack the ability to cope, there is only one thing to do and that is to give them a preparatory period in which they are helped to develop capacities for individual intensive work and to acquire learning habits and techniques.

If the candidate masters the programme satisfactorily, his educational status changes; he has achieved a higher degree of formal education, but in another field. Now he returns to a higher position that the one he held in his previous vocation, in a field which is new to him.

Graduates returning with their diplomas to their previous working organization, where they are known, are faced with special difficulties. Their former colleagues may find it difficult to put up with the considerable difference in their knowledge and qualification in comparison with the period before recurrent education. The resistance of the working environment can be partly explained by the lack of ability of people to quickly change their attitudes and behaviour towards their former co-worker; they continue seeing him in the earlier social position and hierarchical scale. Recurrent education can, in a certain sense, disturb social relations in a working group. All these problems disappear if the graduate changes his environment.

This type III of recurrent education causes vocational mobility, and the possibility of changing branches of activity. In certain situations this type of recurrent education is inevitable, especially when the vocation is short of qualified people and they have to be brought in from outside. People sometimes join this type of recurrent education as a result of a

wrong vocational decision taken too early or when a young man cannot follow his own interests owing to material and other reasons. Later on, when he has established his economic and social status, he can change his vocation according to his desires and abilities. A higher degree of education can only be obtained when the new vocation is close to the former one.

Horizontal Switch of the Vocational Qualification

Recurrent education may also be looked upon as a means of correcting a wrong decision in vocation selection, giving participants the same educational level but in another field. The horizontal educational mobility by means of education from work also enables larger personnel movements in cases where a certain number of employed have to be re-trained in the new dynamic economy. These have been two periods in our social and economic development in which recurrent education played an important role in retraining. The first was the early post-war period when the population was being prepared for industrial work and when the majority of workers were recruited from the peasantry and had no qualification. The people were being qualified for various technical profiles, administration, and every other field which was necessary for industry to start. The shortage of time required quick solutions.

We were faced with a similar situation when the tertiary sector (tourism, trade, catering, services) started developing. A considerable number of the employed switched from industry to the tertiary sector. This caused the development of catering, economic and commercial schools, schools for tourist workers and other similar programmes of recurrent education. This caused the differentiating and economic social function of recurrent education to become important.

Re-training also occurs when workers who have spent a long spell of time doing hard work have to change their vocation for reasons of health. The escape from the productive profiles into managing and administrative jobs is a special problem of re-training; it has no social justification. The wish for better working conditions can go so far that people are prepared

to renounce interest in their vocation regardless of how succesful they may have been in their productive post, indeed, 48 per cent of the students of administrative and legal studies had previously had some productive-technical vocation. This movement of the employed to new fields of work is not sufficiently under social control, for workers are effecting changes in the field of work through various forms of education during work.

Systematic Solutions of Recurrent Education

From the types of recurrent education described above, it may be seen that recurrent education occurs under the influence of various social and economic developments, total development, and partly, still, as a result of the needs of individuals. Recurrent education is a type of group education and cannot be carried out withot the co-ordination of working organizations, various planning institutions for social and economic development and without adequate investment. We can, however, notice that recurrent education has not yet developed into a rounded system of adult education which would enable the workers to acquire their education under standard conditions and under elaborated criteria.

Experience suggests that the systematic organization of recurrent education requires:

— the general legal and self-managing establishment of the socio-economic status of recurrent education, and the rights and the duites of the participants, the organization of associated labour and the educational institutions;

— a special adaptation of the programmes which will take into account the characteristics of the participants group, their life and working experience, their previous knowledge and the total conditions under which the programmes will be carried out;

— the establishment of special organizational models of recurrent education which are planned according to their personnel requirement, programme, applicability and advantages and limitations.

The three above-mentioned areas in which further efforts should be made for the development of recurrent education would gradually solve the problems connected with subjectivity, ad hoc solutions and tem-

porary undertakings and create an intensive process for the diffusion of knowledge. These problems have been the weak points of recurrent education while it has been finding its way alongside regular schooling and education during work.

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PSYCHOLOGICAL ASPECTS OF RECURRENT EDUCATION

Dr. Nikola PASTUOVIĆ

Objectives of Recurrent Education

As we know, recurrent education is a strategy for the practical application of the idea of permanent education. It consists in the regular alternation of periods of work with period of education, thus doing away with the divisions of the social stages in a person's life, which include: the period of study as a preparation for life, the period of work and that of retirement. Such a division is untenable for several reasons, the most important of which are:

1. It leads to considerable differences in education between the older and the younger generation. With the increase in the financial and material resources of society, the standard of education also increases; however, it is not equally accessible to all. It is more accessible to younger people than to adults; and this goes against the principle of the democratization of education, i.e. the equal right of all to education, which is an important factor in the social and economic status of the individual and his family. In such a situation, adults are less privileged with regard to education, while young people are less privilege with regard to work.

2. The rapid social, scientific and technological development, which is a permanent trend, requires permanent learning, i.e. throughout one's lifetime, and not only during one's youth. The concentration of education during the periods of childhood and youth correspond to a static society, one which is not develop-

ing and in which education actually means preparation for life. A dynamic society requires a more even distribution of the learning activities and the integration of the learning process into all the different life periods, in keeping with the specific requirements of each particular period.

3. The separation of education from labour is one of the main reasons why the number of educational institutions has grown, but the quality of education has dropped, especially that of higher education; and this has led to the "crisis in education". Education which is not connected with work develops along the lines of its own autonomous logic. This is why the considerable increase in the number of students is not in keeping with either the needs of the economy and of society or the financial resources available, and why structural discrepancies are increasing between the educational output of various profiles and the requirements of society. This makes it ever more difficult to meet the manpower requirements of the economy. Therefore, investing in education no longer produces the desired results.

4. Education is also a factor affecting personality development and sustaining a person's mental condition. Discontinuing education and taking on a job leads to a rupture in the development of a person's intellectual abilities and to their gradual degeneration. Education makes a person intellectually vigorous and productive even in later years. Physical and intellectual activities slow down the process of aging, and for that reason, too, it is useful to prolong the learning activity throughout one's life.

We can thus say that recurrent education, i.e. the establishment of links between work and education, is indispensable for social, economic and humanistic reasons. Therefore, recurrent education can be viewed as a means of putting into practice the idea of permanent education, especially when schooling is concerned. The educational reform in Yugoslavia envisages that young people should have continual schooling until they are trained for their particular fields, after which they take on employment and can study for higher degrees within the system of recurrent education, depending on the requirements of their work organization, abilities, dedication and personal aspirations. In continuing their schooling, they retain all

the rights provided by their employment, which guarantees them full social security.

For such an educational strategy to be successfully carried out, a number of economic, legal, organizational and other requirements must be met. We shall focus on the phychological aspects of recurrent education, which need to be analyzed in more detail since, after all, it is man, with his abilities, experience, aspirations and interests, who is the subject of recurrent education.

Factors Affecting Successful Adult Learning

Implied in the idea of permanent education and the strategy of recurrent education is the fact that the factors affecting successful learning are largely present throughout one's lifetime, or at least throughout one's active life, and not only during one's childhood and youth. The results of research carried out by a large number of scholars bear out this hypothesis, and this provides a scientific basis for adult education.[1] Thus the different theories postulating that adults have inferior learning capacities have proved invalid, which means that education need not be the monopoly of young people, and that people of different ages can be included in the learning process. Furthermore, gerontological studies have shown that learning and education are necessary for maintaining a person's intellectual capacities at a certain potential functional level, and that they therefore represent an important factor for prolonging a person's working ability.

It is, thus, no longer necessary to corroborate the fact that adults are capable of learning; therefore research should be focused on establishing the specific character of adult learning, especially when compared with the way young people learn. Since differences exist between the learning of adults and that of young people, that is, differences in certain factors which determine the efficiency of learning, an awareness of these characteristics is required in order to ensure that learners of different ages will be able to achieve the optimum educational results.

As with any other activity, success in learning also depends on objective and subjective factors. The main objective factors for successful learning lie in

the learning conditions, such as: the time available, the physical circumstances under which the learning process takes place, the organization of the learning process, the available teaching aids, books, manuals, etc. We will not go into a detailed analysis of these factors, which, although very important for success in adult learning and education, can also represent a limiting factor. Generally, the objective learning conditions are still more favourable for young people than for adults, and one of the priorities of educational policy should be to see that appropriate measures are passed to ensure favourable conditions for adult education. Unless this is done, the idea underlying recurrent education might be brought into question.

The subjective factors for successful learning are the following: the state of the intellectual and psychomotor capacities which are important for taking in the subject matter, the degree of relevant experience and foreknowledge, the ability to learn, or mental fitness, and motivation for learning. The purpose of this study is to point out the differential traits of adult learning for each of the above factors within the context of recurrent education, with a view to making use of the specific advantages of adult learning and reducing as far as possible any shortcomings that may arise.

Learning Abilities

The relationship between the abilities required for learning and the activity of learning itself can be viewed from two complementary aspects. One of the aspects concerns the influence of a person's ability on success in learning, and the other concerns the influence of learning on the development and preservation of the abilities involved in learning. Since the development of these abilities depends on the interaction between the innate base (disposition), the influence of the environment and self-activity, the learning activity has a positive effect on the development and maintenance of the abilities involved in the process. In other words, the abilities which are important for learning can be developed through practice. In this section, we will not elaborate this problem any further, but will rather focus our attention on the relationship between the level of ability and success in learning, i.e. how age can affect the abilities which are important for successful learning.

Perceptive abilities begin to decline, with considerable differences among individuals, already after adolescence, but this is not of particular relevance for success in learning and can be compensated for by means of teaching aids. Far more important for success in learning are mnemonic ability and intelligence.

Recent studies by Soviet authors have shown that the development of memory is not a regular process, but that it consists of several temporary remissions of different lengths, in other words, of rises and falls. According to the results obtained, memory reaches its peak at the age of 35, and not between the age of 22 and 25, as Thorndike maintained.[2] What actually happens to the mnemonic ability after the age of 40 has not been sufficiently studied, but it seems quite probable that this function will have deteriorated owing to a reduction in the capacity of the "information channels" and the weakened ability of short-term memorization.[3]

For our purpose, we can define intelligence as the ability to solve problems, i.e. to adapt to new situations. According to the results of various studies, it reaches its peak between the ages of 16 and 25, after which it begins to decline first slowly then at an accelerated pace. The results of studies carried out by some Soviet authors show, however, that intelligence develops through a longer period of time and declines more slowly. Still, this can be explained by the fact that it is dificult to eliminate from intelligence tests the knowledge accumulated through the years. Because of this, these results cannot be properly interpreted and further studies are required.

Thought is defined as a process of discovering the basic relationships and links between elements in a given situation. The difference between intelligence and thought consists only in that intelligence is an ability, while thought is an activity and process during which intelligence is used, as well as previous experience and scientific models, i.e. problem solving techniques. The development of thought, therefore, lasts longer than that of intelligence, especially in individuals who, duirng this activity, make use of techniques of intellectual work and who are at least of average intelligence, which is a prerequisite for mastery and proper application of these techniques and models. It is therefore possible for the ability to

think to continue to develop even when intelligence is on the decline, owing to the increasing influence of experience, i.e. the application of the learnt models and techniques of dealing with given symbols. Owing to his fact, high scores can be maintained in the intelligence tests and can be even further improved through intelligent learning, because the learner thus acquires more relevant experience. Therefore, the "learning ability", which is measured by the quantity and quality of the subject-matter learnt, can, like all other work abilities, increase with age, since success in learning does not depend solely on natural dispositions but also on training and experience. If to this we add the factor of motivation for learning, which does not directly affect the learning ability (it affects it indirectly as a factor of experience and training), but which determines the extent to which the learning ability will be used, then we see that, in spite of the decline of some of the intellectual functions after one has passed one's prime, not only need success in learning not necessarily fall off, but it can be augmented by the presence of an increase in the number of factors which improve it.

As regards psychomotor abilities, which are important for acquiring skills, it can be said that strength and endurance are at their highest during the fourth decade of one's life and can be maintained by systematic training for a long time after that. The dexterity of certain parts of the body (hands, arms, body, etc.) falls off at a somewhat faster rate, so that, as a rule, younger people can learn various skills faster than older people, but adults show greater perfection, i.e. they make fewer mistakes in carrying out a psychomotor assignment.

Relevant Experience and Foreknowledge

The objective of organized learning, i.e. education, is that the knowledge acquired can later be applied in practice, in other words, this knowledge can serve later on as a basis for problem solving in new situations. Because of this, it is important that the learning process itself be carried out at the highest possible qualitative level. These levels can be differentiated by the way the learning target is attained. Thus we differentiate at least four different levels of learning:

1. recognizing the correct solutions,
2. reproducing the correct reactions,
3. applying a scientific solution in a new situation,
4. independently discovering the correct solution which had previously not been learnt.

The qualitative level of what has been learnt, i.e. the ability to apply the knowledge in practice and in new situations, depends on the extent to which cognitive processes, processes of thinking rather than mechanical memorization, were applied in learning. This also determines how much a person will understand of what is being learnt and is a prerequisite for the successful application of the acquired knowledge. In learning with understanding, a person relates new elements to those already known, and is creative, since he discovers on his own the basic interconnections and relations between the elements in a given situation. Such learning is carried out by leaps and bounds, because the solution is not arrived at gradually but abruptly.

Greater experience in everyday life and work makes it possible for the employed adult to study with more understanding and to achieve better and more permanent results than a younger person. Wider experience makes it possible to establish links between new material and that which is already familiar, in other words, between the theory taught in school and the practical experience which the learner has already acquired during the educational process. Young people are unable to establish these interrelations simply because they do not have the relevant experience. For them, therefore, many things do not have the same significance which they have for people with the relevant experience. Young people are simply "forced" to learn a lot of things without real understanding, i.e. mechanically and by heart. If, for example, factors of work productivity have to be learnt, all the adult who works in a factory requires is assistance in systematizing and linking up all that he already knows about it, while a young person can learn to reproduce it all properly and even to interpret it, but with far fewer associations with reality, since he possesses no relevant experience in the subject. The process of interrelating facts will only begin after the young person has taken up employment, with the

result that young educated people are not of much use until they have managed to combine theory and practice.

In connection with this, it should be said that not every past experience or foreknowledge is, in itself, relevant. Only that experience which is, objectively speaking, in some way logically related to the new subject is relevant, regardless of whether the learner is aware of this relationship or not. Moreover, different educational and professional profiles are differently affected by past experience. It can be assumed that experience for everyday life and work is more important for the humanities than for the study of natural sciences and medicine, or for the study of art; furthermore, it is more important for the study of applied art than for that of fundamental art, etc. It would be very useful to identify the professions for which past experience is useful, i.e. those professions for which accelerated continued education is preferable, if such professions actually exist and if a differentiated approach is to be applied to recurrent education.

As regards relevant foreknowledge, young people who study continually are, on the average, in a better position than adults. The foreknowledge of young people is more systematic and more homogeneous than that of adults, who, owing to both long disuse and involvement in other activities, have forgotten part of what they had previously learnt. It is useful, therefore, before the learners become involved in the educational process, to examine their foreknowledge and to apply brief educational forms in order to achieve more uniformity in the foreknowledge required for successfully mastering the new subject-matter.

Studying with understanding helps the subject retain the material for a longer period of time. An awareness of the relationship between the new material and that which is already familiar to the learner makes it possible to incorporate the new subject-matter into the system of the existing knowledge, which is an important mainstay against forgetting.

Past experience can slow down the learning process if it is abundant and if it tends to interfere with learning. Thus, for example, if a new situation gives rise to a large number of different interrelations and associations, this can lead to temporary confusion and the prolonged search for the right course of action,

i.e. the identification of interrelations and associations which are essential for finding the solution.

Relevant past experience can interfere if structured in a way which is contrary to the principles and rules of new experience. This is seen in all the different forms of learning, i.e. in acquiring knowledge and skills, habits and attitudes. Every change in established behaviour requires more time and effort than does taking in new material without any previous experience, since the existing structures first have to be broken down before the new ones are developed. We all know that drivers who have learnt to drive on the left-hand side of the road encounter great difficulties when they have to switch to the right-hand side, and vice-versa, and that older people are reluctant to change their profession, etc. It is most difficult to change attitudes and beliefs, especially when they have been built into a system, such as an ideology. All this accounts for the relative conservativism of adults as is manifested in their resistance to change. An adult person, economizing energy expenditure, will be reluctant to learn new forms of behaviour as long as the existing ones meet his expectations with regard to efficiency.

In conclusion, we can say that relevant past experience positively affects the quality of learning and the retention of the material learnt by adults, i.e. employed people involved in the process of recurrent education. It can, on the other hand, also slow down the learning process if there is an abundance of past experience and if it tends to cause interference. In young people, the relevant foreknowledge is, as a rule, more systematic and more rounded off than in adults, but, in adults this can be made up for by giving the learner assistance before he engages in the learning process.

Ability to Learn or Mental Fitness

Just as there is physical fitness, which determines the effect of physical activities, so there is the so-called "mental fitness", which has a considerable effect on intellectual activities, including learning. Mental fitness is a functional condition resulting from the extent to which the habits and discipline of intellectual and complex psychomotor activity have been

developed.[4] It largely depends on the regular use or disuse of the structures operating in the learning process. Therefore, intellectuals can retain a high mental fitness even at an advanced age. On the other hand, in people not involved in the process of learning, a deterioration can be observed in memory, thought and attention.[5] In other words, regular and continuing learning has a positive effect on the ability to learn, while intermissions in learning have a negative effect, especially if they are unexpected, as have various kinds of internal and external distractors, i.e. everything which draws the subject's attention away from the learning activity.

Proceeding from this assumption, the following assessments can be made: compared with the continuing, regular education of young people, for whom learning is the main and only duty, recurrent education is at a disadvantage, since it is not continual and since the adults involved in the process are exposed to a large number of distractors which hinder the learning process. Apart from their commitments at work, they also have family and social commitments, poorer healt conditions, and have already acquired a number of habits which conflict with learning. Married women with children are in a particularly unfavourable position. Because of this, adults not only have less time for learning but they find it more difficult to concentrate on learning, and their mental fitness is, in general, poorer that in young learners. It is, therefore, necessary to improve as far as possible the learning conditions for adults, and it is most important that the learners are free of all commitments at work. during the educational process.

On the other hand, the education of employed persons has a positive effect on the maintenance and development of their mental fitness. Periodic involvement in the educational process, i.e. the alternation of periods of education and work, refreshes the learner's intellectual functions, in other words it helps to maintain the learning ability at the highest possible level.

The shortcomings of recurrent education, resulting from the discontinuation of the process, can be alleviated by introducing informal educational activities during the periods when formal education is replaced by periods of work. In other words, in a comprehensive interpretation and application of the notion of recurrent education, which refuses to identify educa-

tion with schooling, it is clear that a person will have to see education and work as being closely interrelated and that he will have to learn throughout his lifetime in order to be able to make his way through life successfully. However, this does not imply that he will have to go to school all his life. Higher forms of formal education can be mastered with on-the-job-training, but this does not mean that schooling should be uniformly distributed throughout one's lifetime. From an economic and phychological point of view, a concentration of schooling at an early stage is justified. Informal training, self-education and self-learning should be practiced more frequently at a later stage in life, and these activities should be organized either on the job or after work. In this way, it is possible to transcend the narrow views which tend to identify continuing education with schooling.

Therefore, the optimal combination of different form of education and their optimal number at the different stages in life and in different social and economic circumstances represents one of the most important issues in the study of recurrent education.

Since mental fitness depends to a large extent on practice, it does not have the same importance for all the categories of learners involved in recurrent education; it is particularly important for those people who have never developed the techniques and habits of intellectual activity, or who have discontinued learning for a long period of time. These are generally unskilled people working at manual jobs. This is a problem which is often neglected in practice, and especially in theory, since conclusions on the learning ablities of adults are usually drawn on the basis of positive examples of individuals who have been trained on the job, have acquired the highest educational degrees and have had brilliant professional careers. What is most often forgotten is that these are extremely talented and diligent individuals, who can be seen rather as exceptions to the general rule. Highly educated people and scholars manage to maintain their mental fitness at an extremely high level for a long number of years; they are involved in intellectual activities at their job and are thus exposed to continuing learning though they do not attend school any more. People with poor learning abilities should, therefore, be assisted in various ways, including advice and instructions for logical reading, since these are the most

frequent difficulties encountered by people who have not acquired the proper education.

In order to organize learning properly, the subject has to know how to plan the learning process, then he must be familiar with learning techniques and the external conditions required for successful learning. Those people who, after a prolonged period, take up studies again should be instructed how to study; their progress should be closely observed and they should be assisted every time they encounter difficulties. Such assistance is particularly valuable in the initial stage, before the subject has learned how to study.

The subject's ability to read logically depends upon the level of his functional literacy. A person is functionally literate when he has the required knowledge and skills in reading and note-taking, assuming that he also understands what he is reading. The understanding of what is being learnt depends on the subject's foreknowledge and ability to think logically, which consists in the criteria he has learnt enabling him to choose the proper approach to problem solving. These are criteria of self-evaluation which have been learnt; but the degree of the subject's integration also plays an important role in forming these criteria.

As we can see, the ability to learn, i.e. mental fitness, is an important factor in the effectiveness of recurrent education. It is reflected in learning and develops during the learning process with organized assistence from outside. Continuity in learning, which is a particularly important constituent of mental fitness, can be ensured through the combination of certain formal aspects of recurrent education with informal aspect of education and self-education.

Motivation for Education

In learning, as in most other activities, motivation is the most important factor for success. Greater application is ineffective only in those activities which require special talent or in persons who do not have the required abilities. There are considerable differences in the motivation for learning between young people and adults. Children and young people take up learning without any clear idea of the targets to be attained through education. That is why they study for school rather than for life, in other words, they

study in order to satisfy the demands of their parents and teachers. Such learning is in fact imposed upon the student, and his attitude towards school and learning and his willingness or unwillingness to adopt regular learning habits will depend on the skill of the teacher or educator. Some young people have such a negative attitude towards education that they abandon school as soon as they have completed their compulsory education, and some drop out even before, regardless of the harmful effects which such decisions may entail. However, most of them return to education at a later stage and achieve far better results. This shows that motivation for education changes and develops together with one's experience in life.

While in children and young people, the main stimulus for learning is praise and avoidance of punishment, in adult learners the following motives are important: the desire to put what has been learned into practical use, i.e. to draw some practical benefits; the financial benefits derived from the possession of a higher degree in education; the desire for promotion, social prestige and the power which a degree or title can secure. Of course, apart from these very important targets, there are also those of minor importance which have been identified through empiric research.[6] These are, for example: the desire of knowledge (the need for self-actualization) and for social contacts set up within the educational group, among many other individual objectives. In any case, the motivation for learning in adults is clearly determined. It aims at acquiring financial, social or psychological benefits, which can be acquired through learning immediately or later on.

For this reason, adult learners are more interested in vocational training or professional training than in general education,[7] since it is more useful for them in carrying out their work, for keeping their job or for promotion. Furthermore, they prefer brief educational courses to prolonged continual schooling. Owing to the fact that they have a number of other commitments, employed people must invest energy in education sparingly. That is why they wish to attain the learning targets as soon as possible and are reluctant to accept prolonged forms of education. Since for them time is valuable, and since they possess the criteria for evaluating the benefits drawn from education, they are more critical towards the content, or-

ganization and methods of education. If they consider that the benefits of education are not proportionate to the efforts invested, then they tend to give it up. This speaks in favour of recurrent education, which consists of a series of short programmes designed for specific purposes, drawn up an evaluated with the participation of the prospective users.

On the other hand, this does not mean that adults have fewer educational requirements. On the contrary, the higher the educational level of an employed person, the greater his need for education. The adult has had a chance to see for himself what the benefits of education are and therefore wishes to pursue his education. This means that education not only meets the existing requirements but creates new ones, which shows that underlying the notion of continuing education are psychological factors. The least educated people, whose objective need for education is the greatest, are those who themselves feel the least need for education. On the other hand, top professionals are continually involved in the process of education, without any external pressure being applied.

The connection between motivation for education and age is rather complex. This relationship varies in intensity and undergoes qualitative changes, which means that the structure of the motivation factors and the structure of the objectives to be attained by education also change. Not all the objectives are, however, equally desirable from a social point of view, and thus discrepancies may arise between the individual and the social interests in education.[8] As we know, financial interests and especially the desire for social prestige are among the main reasons why adults are flocking to various vocational and technical colleges and universities (the so-called "educational boom"); they are not, in other words, primarily motivated by the desire for knowledge or by the needs felt by the economy or by society for such specialists. If the efforts and resources invested by the individual in education do not produce the expected results, he becomes less motivated not only for further education but also for work; he is disappointed in a society which encourages unrealistic illusions regarding the possibilities of mass promotion.[9] Recurrent education must, therefore, act as one of the main regulatory mechanisms to co-ordinate individual and general interests in education and to bring the structural dis-

harmony between educational output and the needs of the economy within tolerable limits.

In connection with this, we would like to point to several important problems concerning motivation for education, problems which have emerged in the mass pursuance of recurrent education and for which further empirical studies are required. They are as follows:

— Why do young people generally refuse to take on a job once they have acquired professional qualifications, and wish to further prolong their education?

What are the main reasons for the discrepancy between, on the one hand the professional aspirations of pupils and university students, and on the other, the requirements of the economy and of society for special profiles? This discrepancy is seen in the fact that there is a surplus of certain occupations and a lack of others; there is a surplus of white collar workers and a lack of blue collar workers. What are the reasons for the appeal of certain occupations and how can this situation be changed?

It is, of course, necessary to systematically study the specific differences between the learning of young people and the learning of adults with regard to other factors affecting successful learning. For, to quote D. Savićević, "if the idea of lifelong learning is accepted, then this has concrete psychological and educational implications. The psychological sciences and educational sciences are put before the new task of studying the characteristics of learning and education during the different periods of a person's life."[10]

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FINANCING RECURRENT EDUCATION IN YUGOSLAVIA

Dr. Zoran JAŠIĆ

The analysis of the financial aspect of a particular segment of the educational system and policy must start from its economic and social effects on the economic system of a country. In the multiplicity of its forms and effects, recurrent education is the most dynamic strategy of the educational policy. In order to become aware of the complexity of financing recurrent education, we must consider two basic economic factors: the role of recurrent education as an investment and the place of recurrent education in the process of the structural change in the social and economic system of a particular country.

Education as a specific investment in the human factor, in the sense of Marx's *capital fixe*, is the basic proposition for an investigation of the influence of education on economic and social development. Education as an investment is given a special character by recurrent education. Owing to the constant need to adjust to the changes brought about by technical progress, it is becoming more and more difficult to find an adequate means for measuring the contribution of recurrent education to economic and social development. It is not possible to consider the contribution of recurrent education in isolation from other segments of education. It is especially significant to note that this strategy of educational development is complementary to the changes produced by technical progress. In such conditions, the methodology attempting to quantify the economic effects of recurrent edu-

cation would be incomplete without considering numerous other effects which cannot be quantified.

The usual division of the working life of an individual into three phases — pure education, combination of education and work and pure work — is being replaced, in conditions of fast changes, by more flexible combinations of learning and work in all phases of life.[1] This creates the need for the unified and systematic planning of recurrent education, not just in order to achieve maximum income but rather in order to help develop a more versatile personality able to participate in decision-making in all spheres of social life.

The structural changes in the economy are another important factor in the analysis of the economic effects of recurrent education. The diminishing role of the primary and secondary sectors and the growing role of the tertiary sector have forced recurrent education to become an instrument for the elimination of various forms of structural unemployment. In modern conditions, the chances of employment in the tertiary sector are also diminishing. We speak more and more about the impossibility of re-establishing full employment in the classical sense of the term. Such a situation stimulates a search for new forms of recurrent education which would allow more flexible changes of jobs and a more meaningful activity in the period when the worker is not working.[2] In such conditions, recurrent education stops being used for individual advancement in competition with other employees, but rather, owing to the growing role of the union in this sphere, recurrent education becomes a way of alleviating the burden which, resulting from structural changes and related unemployment, could fall on the shoulders of the working class.[3] This is why the recurrent education is also used in the attempt to anticipate structural changes and increase the flexibility of available jobs. Its importance may also be deduced from the stress placed by OECD member countries in their economic policies on financial and other forms of stimulation to make recurrent education as effective as possible in the service of economic and social development.[4]

The structural changes which have taken place in the Yugoslav economy have increasingly stressed the need for the overall educational system to adapt more quickly to the needs for cadres felt both by the eco-

nomy and by society.[3] These changes result from the mutual interaction of development efforts which have been made in various spheres of the economy by the factors responsible for the implementation of economic policy as well from the perfecting of the institutional characteristics of the economic system, leading to the growing affirmation of workers' self-management as a basic framework of structural change. The human factor has played a decisive role in these processes. The improvement of its quality through various forms of education has contributed to a successful economic and social development.

Great efforts have been made in the post-war period to improve the material basis of education. Significant resources have been allocated to it from the GNP. Looking at the composition of expenditure for education, it is evident that more than four-fifths goes on personal income and only about one-fifth on material cost. This structure indicates the extensive character of the development of education in Yugoslavia.

The inadequate integration of education into overall social reproduction has also been partly conditioned by an inadequate system of financing education. The budgetary system of financing education — which was in force from 1946 to 1961 — hindered direct contract between the economy and the educational institutions, which resulted in a discrepancy between the professional profiles produced by the educational system and the needs of the economy for cartain types of cadres. The introduction of funds for the financing of education in 1961 was aimed at the gradual elimination of these disproportions which resulted from a strict budgetary system. In this period, a stronger influence of work organizations on the educational policy was beginning to be felt. By the beginning of the seventies, the need began to be felt for a radical educational reform based on scientifically valid and co-ordinated plans for educational development in accordance with overall social planning.

More and more often the need to reform the curriculum was stressed, so that it would enable education to fulfill the needs created by the scientific-technical revolution. This underlined the importance of recurrent education, which can take various organizational forms. This must be specially stressed in our time, which has witnessed an explosion of knowledge.

This, in turn, intensifies the need to break with the positivistic-encyclopaedic model of a school which overburdens young people, forcing them to memorize a lot of often unnecessary knowledge, data and definitions which the dynamic development of science has overcome and made futile.

The importance of investigating recurrent education and a related financing system in the present phase of social and economic development derives from the following factors:

— the continuous effort of society, within the framework of the long-term development of Yugoslavia up to 1985, to reduce the number of workers with or without lower-grade vocational training to 28,9 percent of the number of employed.[6] This is a complex process requiring great effort and numerous forms of recurrent education on various levels;

— the impulse to stress the role of recurrent education within the overall educational system derives increasingly from the greater structural changes taking place in Yugoslav economy. The growing role of qualitative factors in earning income, strongly influenced by changes in technology, puts great demands on educational adaptability. Above all, an increased flexibility of industrial production (the prompter introduction of processes of innovation) is expected.[7] These changes require the forming of highly skilled cadres;

— the more effective inclusion of our organizations of associated labour into the international diffusion of new technology and the forming of a much wider material and cadre basis, along with increased demands for research, will require specific forms of recurrent and permanent education;

— one of the field in which recurrent education must be included within development plans in a more comprehensive way is that of the elimination of discrepancies in regional development. Experiences in promoting the development of insufficiently developed regions have indicated that inadequate education is a great obstacle in achieving the aims of economic and social development. New educational institutions were often founded instead of using available facilities for more flexible forms of recurrent education.

Bearing in mind these basic actors which will influence the development of recurrent education in Yugoslavia, we simply must try to define the financial instruments which will enable its expansion. In the

existing system of financing education, it is very difficult to quantify the cost of recurrent education because it has different financing sources (private sources, budgets and funds of socio-political associations, resources of work organizations), and because these sources intermesh with other forms of financing education.

An isolated investigation of financing recurrent education is also hindered by the following factors:

1. Financing takes various forms which change from case to case.

2. It uses various forms of educational technology which can be adapted to individual needs.

3. In self-managing society, recurrent education is not only an instrument for the fulfillment of economic aims; it also serves to raise the overall educational and cultural level of workers in order to qualify them for decision-making in the process of social reproduction. This is why any partial cost-benefit analysis of the effects of recurrent education would necessarily be a failure. The qualitative effects of recurrent education must be considered along with the quantitative ones.

All these factors influencing the choice of financing methods must be seen in the context of the free exchange of labour between the users of recurrent education and the institutions offering various forms of recurrent education. They determine, through the system of self-managing agreement, the financing sources in order to achieve the optimal output of recurrent education.

The free exchange of labour is a new category in Yugoslav socio-economic system. It is a new quality the decision-making concerning the disposition of resources to satisfy the needs of education, health and other spheres of the social infrastructure. The former role of the state in satisfying common needs has now been institutionalized within the framework of the free exchange of labour. This is in fact a complex mechanism which should take into account the numerous variables which influence decisions in the various segments of the educational process, recurrent education being one of them, and growing in importance. A special place among these variables is given to the institutional one which regulates the long-term rights of the individual in the sphere of education.

The planning component includes the co-ordination of plans for the education of cadres with the social development plans on the level of individual socio-political associations and organizations of associated labour. Related to it is the technological component which stipulates the need to coordinate education and technical progress. The organizational component is of particular importance when dealing with the principle of the free exchange of labour. It helps us to see the interdependence of the professional and territorial component when setting up the system of self-managing communities of interest.

In the present system of self-managing communities of interest, the financial component has a dominant position, so the complex concept of the free exchange of labour is often reduced to the mere question of finances. In this way, long-term components are neglected, while the short-term interests of particular segments of the educational system are given undue stress, leading to uneconomic expenditure.

The tendency to accumulate the greatest possible resources for specific educational segments or self-managing communities of interest shows that education is considered to be consumption while its value as an investment is neglected. Education as a long-term factor of economic and social development receives even greater prominence if considered as complementary to investments in research and culture. The present system still favours the division into elementary, secondary and higher education. We can hardly speak of recurrent education as a consistently structured strategy, and it is particularly difficult to single out its financial component.

The system of financing education as a whole, including recurrent education, still apears as an exogenous variable in establishing the use of resources for education. Too much stress is laid on the financing of existing educational institutions which educate regular students, neglecting the generations educated previously which need recurrent and continuing education in order to satisfy the requirements of their jobs.

The urgent need for recurrent education may be satisfied through a further strengthening of ties between the organizations of associated work and educational institutions. In such a system, the schools lose their monopoly as "producers of knowledge"

which is certified by a diploma. The organization of associated labour, which is the beneficiary of the educational function, now also participates in the process of "producing knowledge".[3] It thus becomes the generator of feed-back information which should lead to improvements in the learning process at educational institutions.

In such a system of interdependence between the educational institutions and the basic organizations of associated labour, greater stress on the financing of recurrent education would contribute to the more economic use of funds which, in various forms, are now set aside for education. Considering the complex functions of recurrent education, its financial resources should grow more quickly than those of the other educational segments. In spheres where the need for recurrent and permanent education is especially strong, self-managing communities of interest could be formed, covering certain large production complexes which would go beyond the limits of one socio-political community. This would lead to the more rational expenditure of funds set aside for recurrent education.

One of the basic prerequisites for giving recurrent education and equal place among other strategies of education is to treat these expenses as investments. This expenditure is now presented in the structure of expenses as services of an "unproductive character". The resources allotted from income and collective consumption have not always been sufficient to satisfy all the needs of recurrent education. Considering the directions of the structural changes in the economy within the overall concept of educational planning, it is necessary to re-allocate a part of the resources given to communities of interest in the sphere of employment for the needs of recurrent education.

Within the framework of resources allocated to the development of insufficiently developed republics and underdeveloped communes, certain resources should be specifically allocated to particular forms of recurrent education.

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This paper has discussed the basic interdependence of recurrent education and the process of structural

changes in the Yugoslav economy. An awareness of this interdependence is one of the basic prerequisites for increasing the effectiveness of the system of financing recurrent education. In the present phase of social and economic development, the free exchange of labour lays too much stress on its financial aspect. This hinders a more complete study of other limitations and difficulties felt both by the renderers and beneficiaries of recurrent education.

NOTES

1. Such a division is quoted by C. C. v. Weizsäcker in *Zur ökonomischen Theorie des technischen Fortschritts*, Göttingen, 1966, p. 73. According to him, the individual can maximize his income only if he systematically continues his education in the middle phase of his career. »In conditions of sudden technical progress, there is the confusing result that in the first phase of his working life the income does not grow, but fall. However, we soon realize that this astonishing result is due to the fact that, as specific technological processes soon become obsolete, too wide a spectrum of knowledge accumulated over a long period of time seems superfluous, and it seems more to the purpose to space out education in time in order for new knowledge and new changes to be absorbed«. Cf. H. Riese, Ökonomische Überlegungen zur Erwachsenenbildung, in the book H. Riese, H. L. Nieder and U. Mülges, *Bildung für den Beruf*, Westermann Verlag, 1969, p. 37.
2. See *Recurrent Education for the 1980s: Trends and Policies*, Paris, OECD, 1979.
3. See *Recurrent Education and Industrial Democracy*, Paris, OECD, 1979.
4. These stimulants are mentioned in *Manpower and Employment: Problems and Prospects*, Paris, OECD, 1978, especially in paragraphs (b) and (c), pp. 10 and 11.
5. These changes were very fast. In the period from 1939 to 1971, the number of those employed in primary activities was reduced from 74 percent to 37 percent. In the same period, the participation of those employed in secondary activities grew from 12 percent to 26 percent and in the tertiary ones from 13 to 37 percent. In order to see these changes more clearly, it has to be pointed out that similar changes in the structure of some very highly developed economies took much more time. It took the USA 70 years to reduce the agricultural population from 68 percent to 32 percent, Italy 80 years etc.
6. In the postwar period, these has been a constant decline in the number of workers with lower vocational training or even without it. In 1961, they made up 55.2 percent of the employed, and this number was reduced to 42.6 percent in 1972. Cf. *Uticaj obrazovanja kadrova na eko-*

nomski i profesionalni razvoj (The Influence of Educating Cadres on the Professional and Economic Development), Zagreb, Ekonomski institut, 1979, p. 118.

7. See Stevan Blagojević, »Naučno-tehnički progres i promjene u kadrovskoj strukturi« (Scientific and Technical Progress and Chenges in the Structure of Cadres) *Ekonomika udruženog rada*, No. 11, 1974, p. 760.
8. Stipe Šuvar says that the basic organization of associated labour is responsible for the implementation of educational policy in at least three fields: firstly, the planning and declaring of the educational needs of its workers in accordance with its own development plans; secondly, organizing and carrying out the vocational training of pupils, students and other participants as a necessary and very significant component of their education, and thirdly, implementing the programme of permanent education. Cf. Stipe Šuvar, Razvoj obrazovanja i obrazovne politike (The Development of Education and Educational Policy, In *Materijalni i društveni razvoj SR Hrvatske do 2000 godine*, Zagreb, JAZU, 1980, p. 543.

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RECURRENT EDUCATION AND SOCIALIZATION OF EDUCATION IN THE CONTEXT OF SECONDARY AND HIGHER EDUCATION REFORM

Dr. Nikša Nikola ŠOLJAN

The *Educational Reform of 1974* declared that *secondary education is the most critical point of the entire Yugoslav educational system and policy.*[1] This was so, for two principal reasons:

Firstly, secondary schools were divided into different types, and therefore served to generate social inequality and dualism in education. The four-year gymnasium or grammar school mainly prepared students for the university; the four-year technical secondary school trained technicians who than sought employment after graduating or else continued their studies; the trade school lasted three years and produced manual workers. Students from trade schools did not have any real opportunity to continue their studies at the university and only a few of them ever did.

The *second* principal reason for the attention given to the secondary sector was the weakness of the links which existed between education and labour.

What has been done up to now to solve or at least respond to the educational crisis of the early seventies? The answer to this question is not simple. Changes have been introduced everywhere, but actual transformation has not occurred in some regions, provinces and republics. In some other parts of the country, changes have been introduced without the necessary preparation. In some more courageous and

persevering regions, however, the integration of the different kinds of secondary schools has taken place. The three types of schools have been re-organized into *general centres of secondary education*. These centres still have a somewhat transitional character; they do not wish to be a simple amalgam of the former secondary schools, but they have not yet been transformed into new bodies with new identities either. Since the reform was begun in 1974, efforts have also been made to strengthen the ties between secondary education and associated labour, and to adjust the goals of education to the needs of labour. Many work organizations have acted as pioneers in this field, mainly by identifying the type of personnel they need, as well as by contributing to the educational process both by helping to define educational needs and through their role in its organization and finance.[2] In spite of the many changes and innovations, however, the secondary school still remains the "critical point" in the educational system and policy. Why should this be so?

A large part of the reply to this question is because the two factors mentioned above are still operative, even if in a somewhat different way. In other words, secondary education still acts to generate social inequality, and associated labour still lacks sufficient influence in the educational sphere.

One of the principal aims of the reform was the formation of an *integrated secondary school* whose curriculum would qualify all students for their *first* employment and for the continuation of their studies. This means that all graduates from secondary schools should qualify for some employment, yet know that the doors of the university remains open to them. A return to education after a period of employment should be possible either when the worker wishes it, and/or when the need for this is felt by the labour organization which employes him and which can then designate him for further studies.

Changes have therefore been introduced into *the curricula* of secondary schools. In the first two years, all students have a common, basic curriculum and programme is the same for all students, no matter which centre (i.e. school) they attend. This common programme aims principally at the further development of general education and culture. At the same time, it also has a vocational orientation and constitu-

tes the basis for further professional training which can last one, one-and-a-half or two years (two, three of four semesters). Together with the general two-year programme that precedes it, this specialized vocational programme prepares students both for an occupation and for the continuation of their studies. Further studies can be continued either directly after graduation and the military service, or after a period of employment, in the form of recurrent education.[1]

The introduction of one common curriculum for all the students of the first two yars of secondary school has attracted much criticism from those opposing the reform. Essentially, the critics claim that the new secondary school is inferior to the old gymnasium in matters of general education and culture. To this, it can be replied that there is little to substantiate this claim while it should also be stressed that for the majority of students (who would have attended the technical and trade schools in the previous system) general and humanistic education has actually been prolonged for two years. Moreover, a range of optional subjects are available which can, at least partly, satisfy the need of the more motivated students to improve their general education. It needs to be said, in addition, that the acquisition of knowledge need *not* be limited only to the school curriculum. It is even fair to say that the new secondary school would probably be under less attack if it had retained the name *gymnasium!*

On balance, therefore, there does not seem to be sufficient reason to call the curriculum of the first two years into question. This does not extend to the programme of the last two years, however, which in the initial period of implementation of the reform was diversified to such an extent that there existed several hundred variants. This number has now been radically restricted, but there are still too many.

While thus aim of the secondary school reform of 1974 is to establish one system available to all, offering a broad general education and preparing for future employment, the diversified programmes of the third and fourth year of the secondary school are too narrow, and in fact contradict the initial aim of the reform. *This curriculum should be reduced to a few more basic programmes* corresponding to a broad view of what is needed in certain professional areas. The knowledge that the students does not acquire in the

last two, three or four semesters of secondary school can be gained instead, at the beginning of their professional careers. A reduced number of specialized courses in the secondary school would not endanger the integration of students into the world of work since this integration depends primarly on establishing the right relationship between the world of education and the world of associated labour.

A broader professional orientation for the final stage of secondary school would also partly reduce the frantic race, which in recent years has characterized the end of the first stage. This race reflects the wish of most graduates to enroll in a programme preparing them for one of the "office" professions. The attraction to the white collar professions is deeply rooted in the social consciousness of individuals and the community as a whole where office work is radically separated from manual work. It also derives from differences in the financial remuneration, working conditions, and especially in the social status of the respective professions. All these factors go to explain why students and their parents still prefer the white collar to the so-called blue collar jobs.

One of objectives the secondary school reform is *the better co-ordination of educational knowledge on the one hand and the needs of associated labour for certain occupations* on the other. Associated labour today needs a greater number of workers and employees in the material sphere of social production. Consequently, the reformed programmes favour an enrolment policy in which the majority of students, after completing the first stage of secondary education, are directed towards these production-related occupations. This, at least, is so in theory. The practice remains rather unsatisfactory. Most young people still rush towards the more attractive occupations despite the efforts made to persuade both students and parents to choose professions needed by the economy.

This problem cannot be solved by persuasion alone. It is necessary, above all, to change the existing system of value, and especially with regard to the question financial remuneration. As long as this does not change, the race for office jobs is bound to continue. The educational system can exert a positive influence on social change, but it is not the most decisive factor in such change. Educational reform

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cannot be effected in isolation from the broader social framework.

The reform of secondary education also aimed *at eliminating dualism by offering equal educational opportunity to students irrespective of their social and financial status.* Secondary education has however remained dualistic, although it has often taken a somewhat more discreet form. One ask, for instance, do all programmes prepare students equally well for the study of a certain occupation? The answer is in the negative. If the desired field of study is, for example, stomatology, the student enrolled in the programme of "footwear manufacturing" can certainly not compete on an equal basis with someone from a secondary school for dental technicians who has already been taught some of the skills and knowledge he can use in the university. Someone who has mastered the programme devised for "butchers and sausage-makers" is certainly at a disadvantage if he/she competes for medical school with someone who has graduated from a secondary medical centre and been qualified for employment as a "qualified medical worker of a general orientation". The law theoretically gives them the same opportunity in the sense that it *allows* every secondary school graduate to sit for an entrance examination, or to apply to a university. It is obvious, however, that in practice the university is more easily accessible to the graduate of a certain type of secondary school which, at the same time, also qualifies him/her for immediate employment in more attractive white-collar jobs. These students also have a better chance and preparation for subsequent recurrent education. This is the only possible explanation for the continued race for more attractive programmes, which every year leads to the confrontation of official enrolment plans and the individual aspirations of students and their parents.

These are not the only problems that the secondary school reform has encountered up to now. One further problem is related to the official aim — formulated at the beginning of the reform of 1974 — that *young people should become part of the world of work as soon as possible*, i.e. as soon as they *completed their secondary education.* This is based on several premises. One of them is that all further education can be organized later and can alternate with periods of active employment. Secondly, it is believed that a true

change in the pedagogical and social position of the student is possible only if he is linked to the world of labour. The idea embodied in the latter is related to a broader belief that associated labour must have predominant control over educational policy and personnel reproduction. Or, to use a more Yugoslavian terminology, educational and personnel policy and practice should become *socialized*.[4]

The experiences with the reform up to now however show that most secondary school graduates still wish to continue their education at once. Those who do not are, at least in part, those whose secondary school has "discreetly" eliminated from the race for a diploma of higher education. There are other reasons beyond the educational system why some do not wish to continue their studies such as the family background and the financial considerations of the students. In some parts of the country at present about half of the secondary school graduates continue their education at university. Is this in accordance with the proclaimed principles? Does it satisfy the radical demand that *all post-secondary education should be organized in the form of recurrent education and linked to associated labour?* And might it result from the fact that the production system cannot employ so many new workers? If so, then the large number of university students enrolled immediately after graduating from secondary school is a way of reducing the pressure of young people on the world of work. It is also a way of reducing potential unemployment by artificially postponing employment to a later date. If this is the case, then the theory of the early integration of secondary school graduates into the world of work becomes inoperable and endangers one of the basic principles of the educational reform.

What should be done in order to implement the theory that young people should join the world of work earlier, and that their further education should be organized on a lifelong basis and in close association with work? Without presuming to give a complete answer, some possible measures can be presented which might be considered in practical terms as *guarantees* for both education and work. A worker who has been employed should be given an assurance or guarantee (not a formal one, however) that he will have the possibility to continue his schooling and education either by temporarily interrupting work or in

parallel with it. This should be the case not only when it is required by the interests of his work, but also when the worker himself feels the need for further education. The coordination of the needs of the community and the educational wishes and needs of the individual will be an area of great importance in the future. The experience we have had up to now includes a variety of misunderstandings between the worker who wishes to continue his education and his labour organization (his employer). One of the reason for this is the assumption that education is a private commodity rather than a socialized value of both individual and community.

It is essential to the realization of this way of organizing education that the worker keeps his salary during the period of his education. The financial security of the worker (and his family) is directly related to his decision to continue his education. Obviously, fewer workers will continue their education if they know they will lose their salaries. Moreover, they should be entitled to their social security and health insurance, as well as to the opportunity to participate in the self-managing decision making and the functioning of their labour organization. Only when these guarantees become broadly accessible to all workers, will the majority of secondary school graduates seriously consider early entrance into the world of work rather than seek the more secure way of social promotion through higher education.

It should be added, however, that associated labour still cannot guarantee such recurrent education and employment to the young. The ability of associated labour to exercise its educational function is partly stifled by the other problems and tasks it has been facing, particularly during recent years. These have their cause in part in the state of the world economy such as the oil, and general energy, crisis, the unfavourable trade relations between the developed and developing countries, and inflation. In part, the problems reside within the country itself, and one can single out excessive foreign debts, consumption which outstrips production, uneconomic investment, low productivity as principal factors. Owing to all this, associated labour is at present primarily concentrating on its own survival and existence hence neglecting questions of education which are in fact a prerequisite for its own development. The reform, and the original

principles formulated in 1974, remain valid. It has, however, proceeded more slowly; the problems we have mentioned have influenced the pace with which certain changes and innovations have been and are being introduced into secondary and higher education, and, in a wider sense, the pace with which associated labour is *appropriating* and *socializing* education.

In this paper we have not been able to present the situation in secondary education in all its complexity. Hopefully, however, we have shown that it is correct to call it the "critical point" of our entire educational system and policy. The changes it has undergone are much greater than those in pre-school and elementary education and greater particularly than those in higher education.

It should be obvious from this brief discussion that changes in secondary education have a direct impact on *the system and policy of higher education.* Indeed discussion of the changes in secondary education should be considered as a necessary introduction to proper consideration of higher education.

The educational reform begun in 1974 as stated has primarily been aimed at secondary education. More radical reforms in higher education have not passed the stage of official declaration and there have been no changes in the system and policy of higher education since 1974. Despite attempts to initiate changes in various of its aspects, no project has been drafted which would include higher education as a whole. Rather, each organization or institution of higher learning has been asked to effect certain changes in accordance with the principal ideas of educational transformation and the achievements of these efforts could only properly be described by a through empirical analysis of the present state in higher education. As we still do not have such an analysis, we shall begin by quoting an author well acquainted with the situation of higher education in Yugoslavia who stated that "the only thing we can be sure of is that our higher education is in a state of total turmoil".[5]

Certain recent developments can, however, be singled out. One is *the expansion of higher education* as indicated, for instance, in the number of students which has been growing throughout the last decade in the country as a whole, although not in all its regions. In Serbia, for instance, it has grown while it has practically stopped in Croatia. The increase

in the student population has been accompanied by the opening of new institutions of higher learning — "high" and "higher" schools, faculties and universities, a considerable number of which have spung up in the last few years. At present, several hundred requests for the opening of new institutions of higher learning are being processed throughout the country. Soon, as someone has remarked, every village will have its own university. There are exceptions in some regions in which the number of organizations of higher education has actually been trimmed down. This reduction is, however, mainly the result of the integration of certain high schools (više škole) into other related institutions of higher learning.

Higher education has been expanding so fast and has assumed such dimensions that it has literally become an *education for the masses*. This phenomenon is often taken positively to represent a democratization of access, yet it also poses several troubling questions. Is the structure of higher education, for example, coordinated with the social and economic structure of the country? Is higher education serving the needs of economy, of associated labour? Can associated labour and the wider social community bear the growing cost of a constantly expanding system of higher learning?

Regardless of its positive sides, the expansion of higher education in some parts of the country has already created a discrepancy between the needs of associated labour and the professional profiles of the students supplied by the university. While some occupational skills are still in short supply, many university graduates cannot find work, and unemployment may well become a source of social tension. Such an exceptional expansion cannot be supported by adequately growing subsides, and the result must be the decline of material and pedagogical standards. We cannot say that the expansion alone is to blame for the obvious deterioration of teaching standards. It is a fact, however, that the enormous increase in student population has posed serious problems for the maintenance of these standards. The 1974 Reform addressed these very problems and proclaimed *the need to stop the uncontrolled expansion of higher education*. The efforts made in some parts of the country mark only a feeble beginning of this process.

The dumber of students who continue higher education *immediately* after graduating from secondary

school has also been increasing steadily. They became students on the basis of their "school experience". The reform, however, has firmly stated that a student's qualifications should include "work experience" as well. Higher education should, accordingly, begin *after the link with associated labour has been established;* in other words, *after a period of employment,* assumming, therefore, that associated labour will create the necessary facilities and opportunities. In this way higher education would gradually cease to be the private concern of individuals and become instead the *truly socialized (self)activity of associated workers.* It should be clear that the constant growth of students who have no work experience and no real connection with associated labour is a serious obstacle to the development of recurrent education.

The growth of the higher education population which comes directly from the secondary school classroom may be explained in several ways. First of all, as already mentioned, it may well be that associated labour cannot employ such a large number of secondary school graduates, and that growing enrolments in higher education become a palliative solution to the problem of unemployment. This can also be seen as indication that associated labour has not been able to master, so to speak, the functions of higher education in such a short period of time.

Another tendency to be noted in recent years is *the effort to alter the distribution of students according to fields of study,* primarily between the humanities on the one hand and the natural and technical sciences on the other. Previously, the ratio was in favour of the former — especially law and economics — even although it was the latter which were more needed. Measures were taken to remedy this situation, mainly in the form of an enrolment policy. In some parts of the country the first positive results of this policy are being felt already. The problem of balance between subjects has recently received much attention, as serious discrepancies were discovered between the needs of labour and the profiles of knowledge and skills produced by the university, only exacerbating thereby the problem of unemployment. This has been criticized in such terms as *educational l'art pour l'art* and poor investment policy. It also leads to the dissatisfaction of university graduates unable to find adequate employment or any at all. It would not

be realistic to suppose that all individual desires to study a certain field can be satisfied in the foreseable future. It is nevertheless necessary to arrive at a rational relationship between the self-managing pluralism of social interests and the social need for certain occupations on the one hand and the educational aspirations of individuals on the other.

Although some changes in higher education were effected all over the country, *the integration of related schools into larger units* was undertaken only in certain areas. Such integration is, however, generally desirable. It presupposes the linking of several related institutions of higher education, mainly through common educational contents and curricula, both in teaching and research. In this way, the teaching personnel and the various facilities previously dispersed in smaller units could be put to more rational use, which would certainly have a positive effect on the quality of both teaching and research.

This process of integration should also be extended to *institutions which mainly concentrate to research.* The effort to integrate teaching and research institutions is significant as an incentive to expand the research capacity within higher education. It also gives research scholars a chance to teach and to communicate their knowledge and experience directly to the students, or even to include students in their research projects, thereby helping them to become researchers in turn. This would strengthen the traditional coexistence of teaching and research which is already a feature of some institutions of higher education, although in practice these institutions were often pushed towards teaching, while research was treated as a "private" concern of the teachers and relegated to their free time. On the other hand, teaching was practically inaccessible to scholars employed in research institutions. These tendencies seriously endangered the principle of *the unity of teaching and research* — the principle which is firmly endorsed by the reform.

These are only some of the pieces in the mosaic of the social project aiming to transform higher education. This transformation should enable *associated labour to control educational policy and training and supply of personnel.* According to this approach, the workers and citizens, grouped into associations, gain control over the education which was alienated from

them for centuries. Education was controlled by the State which protected the interests of the working classes under the pretence that this was the common interest of all its citizens and controlled education through its administrative apparatus, keeping teachers in line as employees of the State. These relations have survived up to the present, both in Western capitalist countries and in those founded on the model of State socialism. It has in fact also survived in the developing countries.

In contrast, in education, as in other fields, Yugoslavia has based social relations on the premise that *the functions of the State must gradually pass into the hands of the workers and citizens* grouped into associations. This underlies the historical process of *socializing education*, in which *man himself* endeavours to gain control over the totality of his own educational work. We refer here to the need of man to regulate his relationship with other people *without* the mediation of the State nor, therefore, of its educational apparatus which seek to regulate these relationships in his name and in the name of "higher interests". The *socialization of education* can be defined as *the process by which man gains control over the production and reproduction of his own life.*[4]

It remains to be asked, what precisely we mean when we say that higher education should be appropriated and socialized by the citizens and workers through associated labour? This is not the place for a detailed and complete presentation of this complex social process. Some practical, if simplified, implications of the socialization of higher education (and education generally), should be mentioned however.

Briefly, it means that the functions related to the policy and practice of higher education should pass from the State into the hands and competence of the workers and citizens associated into organizations of material and non-material production, as well as into the hands of broader self-managing associations.

One of the basic functions of higher education is *to determine the extent of educational and manpower needs.* These needs depend on the generation of young people and on the workers already engaged in production. We have indicated in this contribution that this is by no means a simple task for several reasons. We stress here the importance of the determination (or, rather, self determination) of needs by

workers and citizens *themselves*, rather than by educational authorities or administration. It is still not possible to say, however, that associated labour has gained control over determining educational and manpower needs through its experiences in this field are growing, and it is to be expected that associated labour will gradually gain more control in this area in the future.

Closely related is *the question of planning* once the needs have been established. Contrasted to the administrative and centralized State planning of higher education found in the greater part of the rest of the world, in Yugoslavia these plans proceed from the basic cells or units of labour and social life. It must be admitted that, as a result of the radical decentralization in planning, problems arise from the need to coordinate all the various interests naturally involved in all levels of higher education planning. *Consultation and mutual agreement* are the basic ways of overcoming any differences which do arise. Compared to centralized planning, such self-managing procedures probably take much more time, more so considering that the process involves educational services and institutions of higher learning in addition to associated labour and numerous other bodies of social planning representing other interests in the community.

The socialization of higher education also includes the need to gain control over the more administrative and less educational functions of higher education such as, for instance, programming, the preparation and implementation of education, and the evaluation of the results achieved. This includes the need to develop cooperation between educational workers and those in other fields. They should all work together on programming, preparing, implementing or evaluating education and thereby extend the participation of associated labour in these activities.

It cannot be claimed that great progress has been made in these areas. Higher education, for instance, is still often *programmed* in the old way mainly by the organizations and employees of higher education with very little participation by workers in other fields. The direct *preparation* and *implementation of education* is still in the hands of the teachers alone. The teaching itself also often follows old patterns, unfavourable for the development of recurrent education and the education itself seems to be geared

to earning the final diploma. In the present system, for instance, the student who interrupts his studies loses the right to the credits he has earned. Furthermore, in spite of the proclaimed *unity of education and work (labour)*, the university has remained exclusively the place for study, and the factory the place for work.

The same could be said of *the evaluation of education*. Now, the way evaluation is reduced to the question of determining the contribution of higher education to labour productivity, to the production of goods in the material sphere, the increase in the gross national product and the general cultural development of society. Here the principal question is: how does one actually measure these values in practice? Whatever the complete answer, we only wish to point out that this should in no case be decided by the institutions of higher learning alone. Both associated labour and the wider social community must find new ways of evaluating the results of higher learning — the evaluation in higher education, in other words, must be further socialized. It should support the liberation of the working man instead of measuring merely a student's capacity to reproduce the material learned from set books.

The new policy and practice of *financing higher education* is another aspect of its socialization. In principle, nearly all higher education should be financed according to the cost in relation to the value of the educational programmes (which includes their contribution to the development of production, the increase of the national product and the furthering of culture). In practice, the finance for higher education was, and often still is, based on the means taken from workers' income according to a *single* or *linear scale*. The principe of the linear scale, however, did not sufficiently stimulate the processes of the *free exchange of labour*, nor encourage more direct contracts and relations between education as a sector and the different spheres of production. This is another reason way associated labour did not quickly become properly involved in the policy and practice of higher education and why efforts are now being made to create differenciated scale.

The financing of higher education according to a *differentiated scale* presupposes that the resources will come from the income of workers in the organizations of associated labour at a sufficient level

to satisfy all the multifaisons needs for education. These needs may be negotiated at the level of individual group or professional fields or (re)productive units. We have reason to expect that this new financing system will influence the development of a new relationship between education and the economic and social worlds in which it is located. It could also encourage recurrent education and accelerate the process of socialization in higher education. With this in view, we suppose that associated labour will allocate and associate various resources for different programmes depending on the educational needs of various groups and areas of production. Certain questions remain open, however. Will the financing of education based on such a differentiated scale have a negative influence on the development of certain specific perhaps specialized programmes? Will the routine demands of associated labour relegate such programmes to the marginal and second order?

These are real questions. Nevertheless, the fact that the *workers themselves* are expected to decide on the resources to satisfy their own educational needs and the learning needs of society in a wider sense, is a further step towards their control over the financing of education. The degree of such control gained by the workers is, however, a function of their more general control over the national product as a whole and over the broad conditions of social production and reproduction. Hence, *the socialization and the recurrent practice of education* (alternating with or running parallel to periods of employment) *depend directly on this more general control by workers over the national product and thereby on the part assigned to education.* It is on this basis that more thoroughgoing change will be possible, in particular in removing the operation of market mechanisms in higher education.

Although we cannot conclude that higher education has in practice been reformed everywhere, certain significant features can be noted. Firstly, there is wide acceptance of the theory that changes in the educational system and policy, including the sphere of higher education, can be effected only by *the workers and citizens associated into their various living and working communities and following the principles of self-managing negotiation and coordination.*' This implies a weakening role for the State in the forma-

tion and implementation of policies in higher education. With the workers and citizens responsible for the practice of labour and of education create the historical basis will be laid for the development of a genuine community of labour and education as well as moving towards a society where education and labour is both unified and un-alienated.

Recent experience also indicates that *the traditional university — as a centralized organization which deals with the State as an independent partner — is beginning to disappear.* It is becoming instead more oriented towards the needs of labour and scientific production rather than towards a centralized and alienated university administration. The new university is thus like associated labour in that it depends more and more on the contribution of institutions of higher learning for the development of personnel, for the creation of new values in material production, for the increase of the national product and the development of social relationships as a whole. In this way, the interests of associated labour and of higher education are common. All this reflects the tendency to reduce the autonomy of the university as a body separate from the interests of labour and to integrate it into associated labour as a whole.

The educational reform of 1974 saw secondary and post-secondary education *together as a system of programmes of variable duration which would be organized along the principle of recurrent education and closely linked with associated labour.* In practice it has become evident, however, that secondary education cannot be re-organized in this way overnight. While there have been many positive innovations, in many cases the changes in the secondary school have in practice only gone as far as levelling the programme of all schools by simply extending a general education from two to four years. This has required a *reform of the reform* which is now attempting to introduce some professional training into the first two years of secondary school and to provide students with a professional qualification even after this first stage of secondary schooling. It has also been suggested that a student would be better qualified to enter a job or to start a university education at the end of secondary schooling if professional and general education were combined throughout the four years. In higher education much more radical changes will be

required if a recurrent education is to be created, i.e. an educational system based on programmes of various duration which can be studied throughout a person's lifetime, unified and alternating with his work and with his other leisure activities.

Such a recurrent education system would significantly alter the concept of *adult education.* It would gradually abolish the differences between "education for the young" and "adult education". Post-elementary education would no longer be determined by the age of the participant, but instead by his role and position in the world of work and education would become permanently open and accessible to all citizens and workers irrespective of their age.

Such changes would also reveal the shortcomings and limitations of dividing the science of education into pedagogy as the theory and practice of educating the young on the one hand and andragogy as the theory and practice of adult education on the other. To be sure, there is a long way to go before adult education is an integral part of a unified educational system and much has to be done to develop a unified educational theory. It has also to be said that the new system of post-elementary education has not resulted in widespread alternation between periods of work and education. Indeed, owing to the fact that associated labour has not yet gained sufficient control over educational policy and the training and re-training of personnel, the development of adult education has even slowed down in recent years. This has probably resulted from the fact that the old foundations for adult education have been crumbling, while the new concept is still not strong enough to stand alone.

Future changes in education depend crucially on the extent to which workers and citizens gain control over all aspects of society and economy. But, regardless of numerous difficulties and contradictions, the process of the present educational reform in Yugoslavia has been an inspiring one. It certainly requires serious scientific and social action which, however, cannot be achieved *invita Minerva.* Particularly as we are participating in a historical process of self-managing change in which educational reform is a *live* performance.'

NOTES

1. A thorough survey of the totality of Yugoslav educational system and policy can be found in the report for the examination of educational policy in Yugoslavia in OECD (Paris, November 1980). See: *Conditions, Problems and Policy of Education in Yugoslavia: Background Report for the OECD.* Paris, OECD, 1981, and the Examiners' Report — *Review of National Policies for Education: Yugoslavia.* Paris, OECD, 1981. See, also, Nikolić, Milenko and Bogavac, Tomislav, *Educational Policy in Yugoslavia.* Belgrade, Jugoslovenski pregled, 1980.
2. Discussions of associating and integrating work and education can be found, among others, in Jergović, Mate, *Jedinstvo rada i obrazovanja* (The Unity of Work and Education). Zagreb, Školska knjiga, 1980, and Šuvar, Stipe, *Škola i tvornica* (School and Factory). Zagreb, Školska knjiga, 1977.
3. For general discussion on the recurrent education, see *Alternation Between Work and Education.* Paris, OECD/CERI, 1978; *Education and Working Life.* Paris, OECD, 1977; *Recurrent Education: A Strategy for Lifelong Learning.* Paris, OECD/CERI, 1973, and *Recurrent Education for the 1980s: Trends and Policies.* Paris, OECD, 1979 (mimeo).
4. See Bosanac, Gordana, »Podruštvljavanje odgoja i obrazovanja: pojam i granice« (The Socialization of Education: the Term and the Limits), in *Pedagogija u samoupravnom socijalističkom društvu* (Pedagogy in the Self-Managing Socialist Society). Zagreb. Pedagoško-književni zbor, 1980, pp. 210—214.
5. Vladimir Podrebarac, former Under-Secretary for Education and Culture of the SR of Croatia — in a conversation with the author.
6. The socialization of education is also elaborated in my book *Prema socijalizaciji obrazovanja* (Towards the Socialization of Education). Zagreb, Andragoški centar, 1982.
7. For a discussion of social relations in education see, for instance, Bosanac, Gordana, *Odgojno-obrazovna djelatnost i udruženi rad* (Educational Activity and Associated Labour). Zagreb, Školska knjiga, 1975.
8. For further discussion of particular problems in Yugoslav educational policy and reform, see my articles »Some Problems of Educational Theory and Practice in Yugoslavia,« *Prospects,* 1977, Vol. VII, No. 2, pp. 184—193; »The Concept of Self-Management and the Socio-Economic Background of Decision-Making in Education: the Yugoslav Model,« *Comparative Education,* 1978, Vol. XIV, No. 1, pp. 65—69, and »Educational Needs and the Philosophy of Democratization in Higher Education in Yugoslavia,« *Prospects,* 1979, Vol. IX, No. 1, pp. 58—68.

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(Prepared by the Editor)

GLOSSARY*

Associated Labour (udruženi rad)

A term used to denote all institutional forms of association of labour by workers who, organized on a self-management basis, perform with socially-owned resources economic and non-economic activities, and also to denote all other forms of pooling of labour and resources by working people on these foundations.

Basic Organization of Associated Labour (osnovna organizacija udruženog rada)

The fundamental form of association of labour in which workers directly and on equal terms realize their socio-economic and other self-management right, and decide on other questions concerning their socio-economic status. A basic organization of associated labour is formed for each unit of a work organization which makes up a working whole (a plant, a technological unit, etc.) in which the results of joint labour can be expressed in terms of value on market or within the work organization concerned.

Commune (općina)

The basic self-managed socio-political community which provides an organic link between all forms of the organization of the working class and working people along self-management lines. Government in the commune is controlled by the working people who come together both as self-managers at work and as self-managers in the satisfaction of their social, cultural and other requirements. The working people in the commune, which is an integral part of the unified social organizm, participate by way of the system of delegates in all forms of government at all levels in the community.

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* The terms were originaly explained in **The Associated Labour Act**, Ljubljana, Doplsna delavska univerza, 1977, pp. 403—419.

Contributions (doprinosi)

This term is used to denote levies collected on part of the income of basic organizations of associated labour and/or on part of citizens' incomes, on the basis of agreement reached by working people. The resources thus collected are used to finance the collective needs of the working people in the fields of education, science, culture, health, social security, etc.

Free Exchange of Labour (slobodna razmjena rada)

A form of earning income in the basic organizations of associated labour which perform activities in the spheres of education, science, culture, health and social welfare or some other social activity. The income is realized by giving services of joint interest, directly and/or within the framework of self-managing communities of interest, from the income of other basic organizations, in accordance with the contribution made by their labour to the generation of value added in material production, the rise in the productivity of total social labour, and the development of society as a whole.

Income (dohodak)

A part of society's total product which workers in basic organizations earn in monetary form as the social recognition of the results of their own and total social labour under conditions of the socialist mode of commodity production, and which they manage in basic organizations on the basis of their right to work with social resources; the part of the gross income after covering the value of all material resources used up in the process of reproduction (material costs) and of the permanent means of production and other instruments of labour.

Organization of Associated Labour (organizacija udruženog rada)

Denotes all forms of independent, self-managing organizations within which the workers engage in economic or other social activities with socially-owned means; forms of association set up on the basis of integration of the labour of workers who work with socially-owned means; in them the workers manage the labour and the business operations of the organization and the affairs and means of social reproduction; they regulate their mutual labour relations, make decisions on the income they realize through various forms of the association of labour and the conception of "organization of associated labour" is a general one which embodies the following concrete forms: basic organization of associated labour, work organization, and complex organization of associated labour. Organizations of associated labour were formerly designated by the words "enterprise" (applicable to the economy) and "institution" (applicable to non-economic activities).

Self-Management Agreements (samoupravni sporazumi)

They are self-management acts adopted, on equal terms, by workers in organizations of associated labour and by workers in work communities, communities of interest and other self-managing organizations, with a view to regulating and co-ordinating their interests for purposes of a more efficient specialization of production, the pooling of labour and resources, and the formation of work and other organizations of associated labour. In this way the regulative and intermediary role of the state concerning relations among working people is curtailed. A self-management agreement is only binding on those who have signed or acceded to it.

Self-Management Communities of Interest (samoupravne interesne zajednice)

They are associations formed by working people directly or through their self-managing organizations and communities, with a view to satisfying their personal and collective needs. Their aim is to link the interests of those who use such services. In self-managing communities of interest users and renderers of services freely exchange their labour (by means of money as the common medium of exchange) to satisfy their needs. According to the Constitution, the assemblies of self-managing communities of interest in the spheres of education, science, culture, health and welfare are authorised to decide, together and on equal terms with the assemblies of the competent socio-political communities (communes, provinces, republics), on all matters falling within these spheres. There are also self-managing communities of interest in the field of housing construction, power production, water resources management, transport, etc.

Self-Managing Organizations and Communities (samoupravne organizacije i zajednice)

This is a general term which covers organizations of associated labour, banks, insurance communities, agricultural and other cooperatives, contractual organizations of associated labour, self-managing communities of interest, local communities, and work communities performing activities on behalf of state and other agencies and organizations.

Social Compact (društveni dogovor)

Social compacts are self-management enactments adopted, on equal terms, by organizations of associated labour and their associations, self-managing communities of interest and other self-managing organizations and communities, agencies of socio-political communities, trade unions and other socio-political and social organizations, by which the parties thereto regulate socio-economic and other relations of common concern, as well as relations

of general concern to the community. The purpose of social compacts is to replace the state's role in the resolution of social contradictions and to ensure co-operation and solidarity in the economic and other spheres of life. Social compacts are binding upon the parties which have concluded or acceded to them, and must be in conformity with the Constitution and Statute.

Socio-Political Communities (društveno-političke zajednice)

Are political-territorial communities in which working people and citizens exercise the constitutionally-defined functions of power and management of other social affairs concerning their collective and/or general social interests, including the direction and coordinating of social development (the federation, republics, autonomous provinces, regional and municipal communities).

Social Reproduction (društvena reprodukcija)

This term is used to denote the process of maintenance and development of society as a whole and covers both production and other activities aimed at the satisfaction of the interests and needs of working people, citizens and the community as a whole, including educational, scientific, cultural, health, welfare and other activities carried out with a view to ensuring social development and advancing the living conditions of the people. Social reproduction includes both the continuation of production on an unchanged scale (simple reproduction) and the continuous expansion of production in line with the rise in society's needs (expanded reproduction).

Social Resources (društvena sredstva)

The term covers all resources used in production and all other resources of associated labour; products created by associated labour; income generated by associated labour; means for the satisfaction of collective and general social needs; natural resources and goods in public use. Such resources are managed by the workers who operate them, in accordance with the Constitution and law. Social resources include both the resources of organizations of associated labour and the resources of banks, communities of life and property insurance, organizations of business associations, self-managing communities of interest, local communities, socio-political communities. Socio-political organizations and other statutorily-defined social organizations may also acquire social resources and use them in the pursuit of their aims and tasks. The rights, obligations and responsibilities concerning the disposal, use and management of social resources are defined by the Constitution and law in conformity with the nature and purpose of such resources.

Work Organization (radna organizacija)

This term denotes a form of the pooling of labour and resources in which workers are linked by their common interests in work (in this case the work organization is composed of several basic organizations of associated labour); or are directly linked through the unity of the labour process (in this case the work organization has no basic organization of associated labour). A work organization is an independent, self-managing organization of associated labour.

Workers (radnici)

This term is used to denote those people who work with socially-owned means of production. It covers all persons who work in organizations of associated labour and in work communities which conduct affairs on behalf of other self-managing organizations and communities, socio-political and other social organizations, associations of citizens and organs of socio-political communities, as well as workers employed by private employers.

Working People (radni ljudi)

This term covers all persons who live from their labour. In addition to workers in associated labour and workers employed by private employers, the term also includes persons who with their own personal labour regularly perform artistic or other cultural activities or free professions; farmers and members of their households engaged in farming; other persons who with their personal labour and with resources in citizens' ownership independently carry out an artisanal activity; and temporarily unemployed.

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